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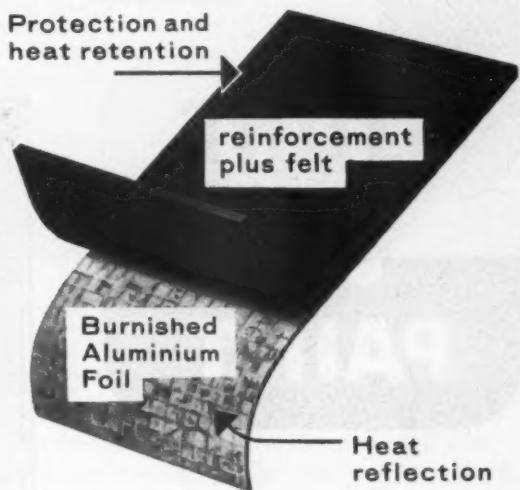
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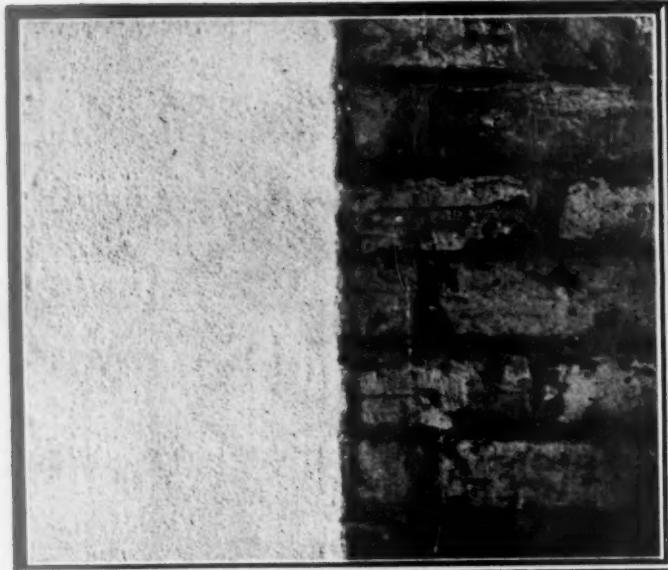
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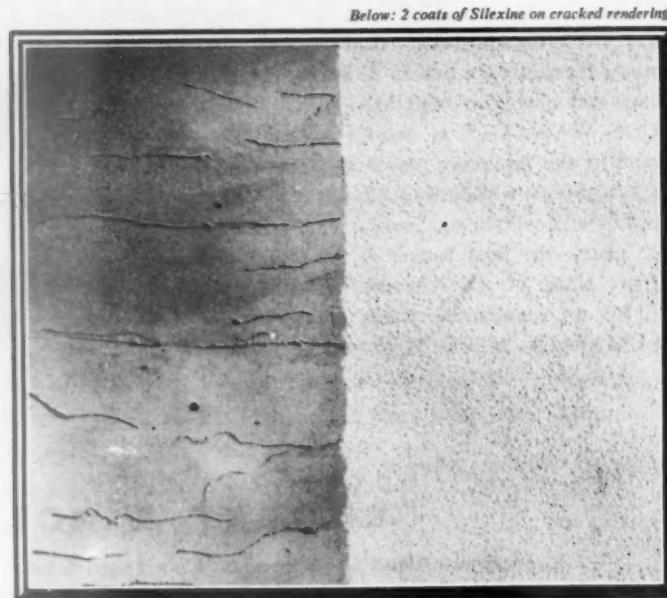


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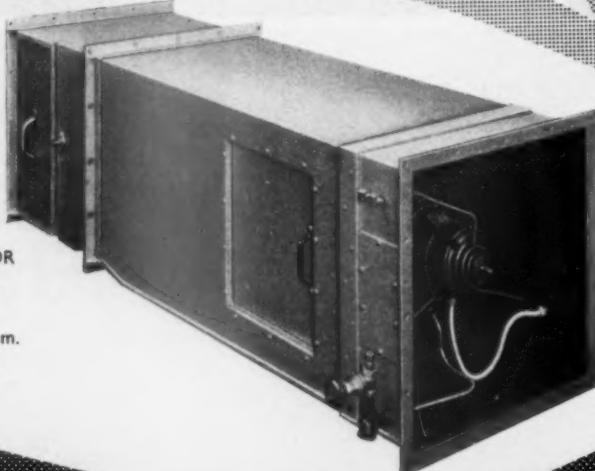
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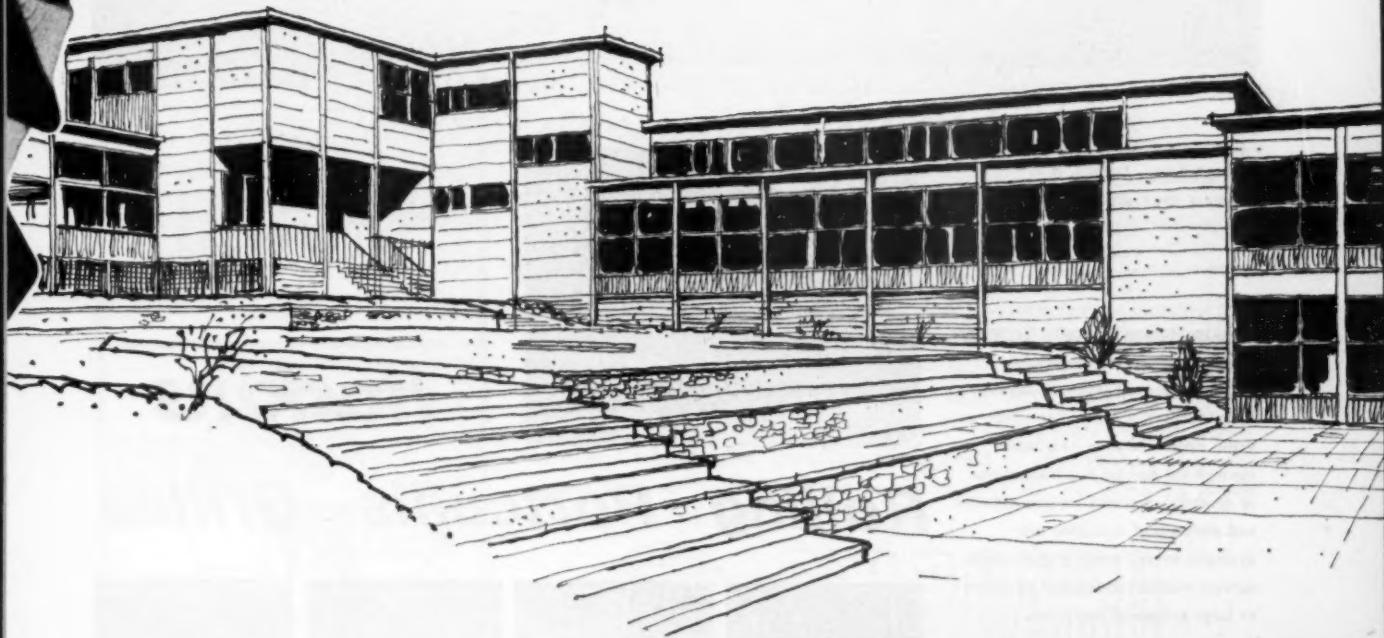
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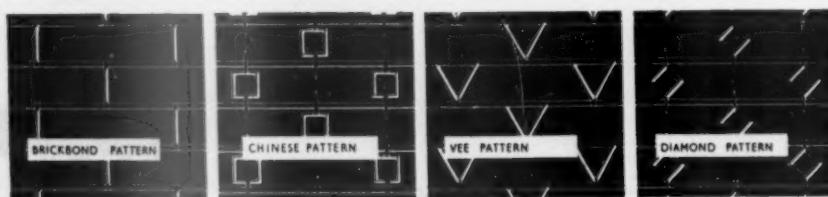
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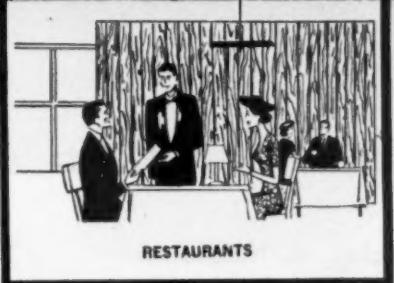
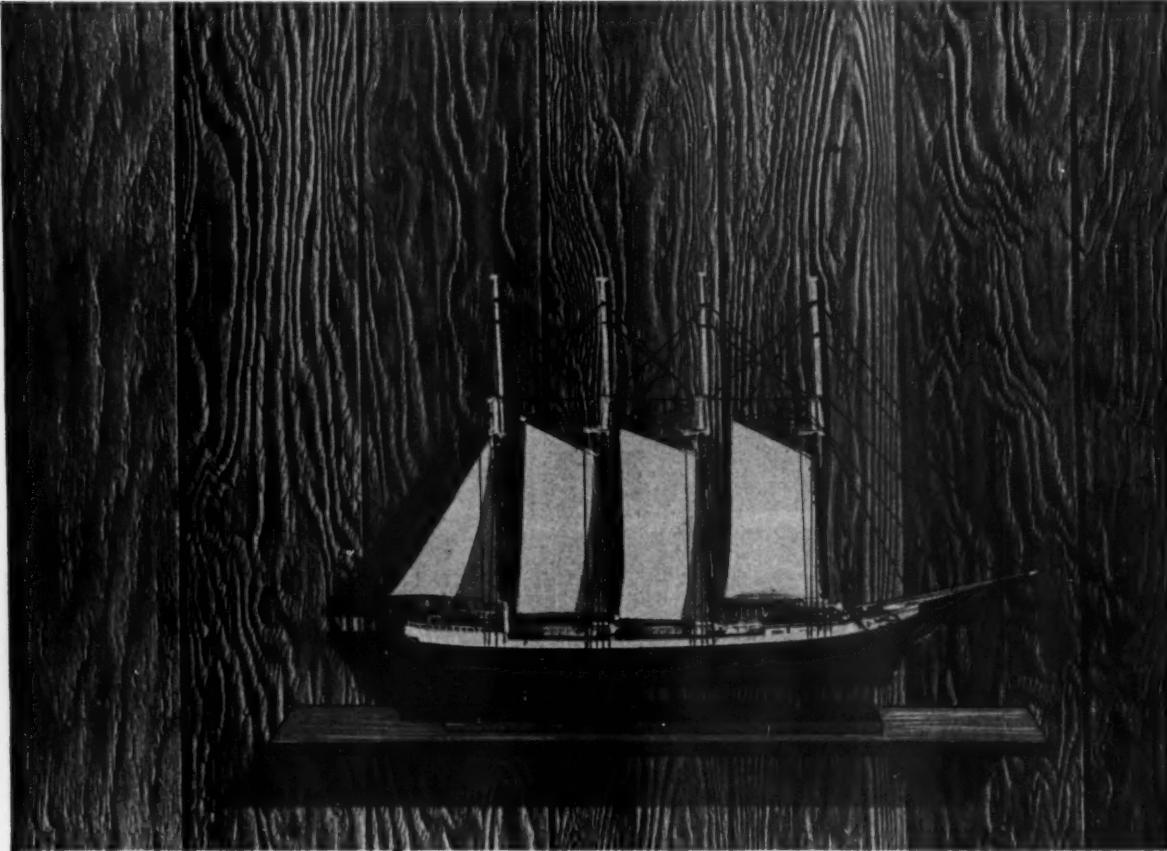
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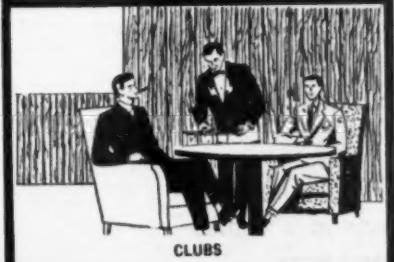
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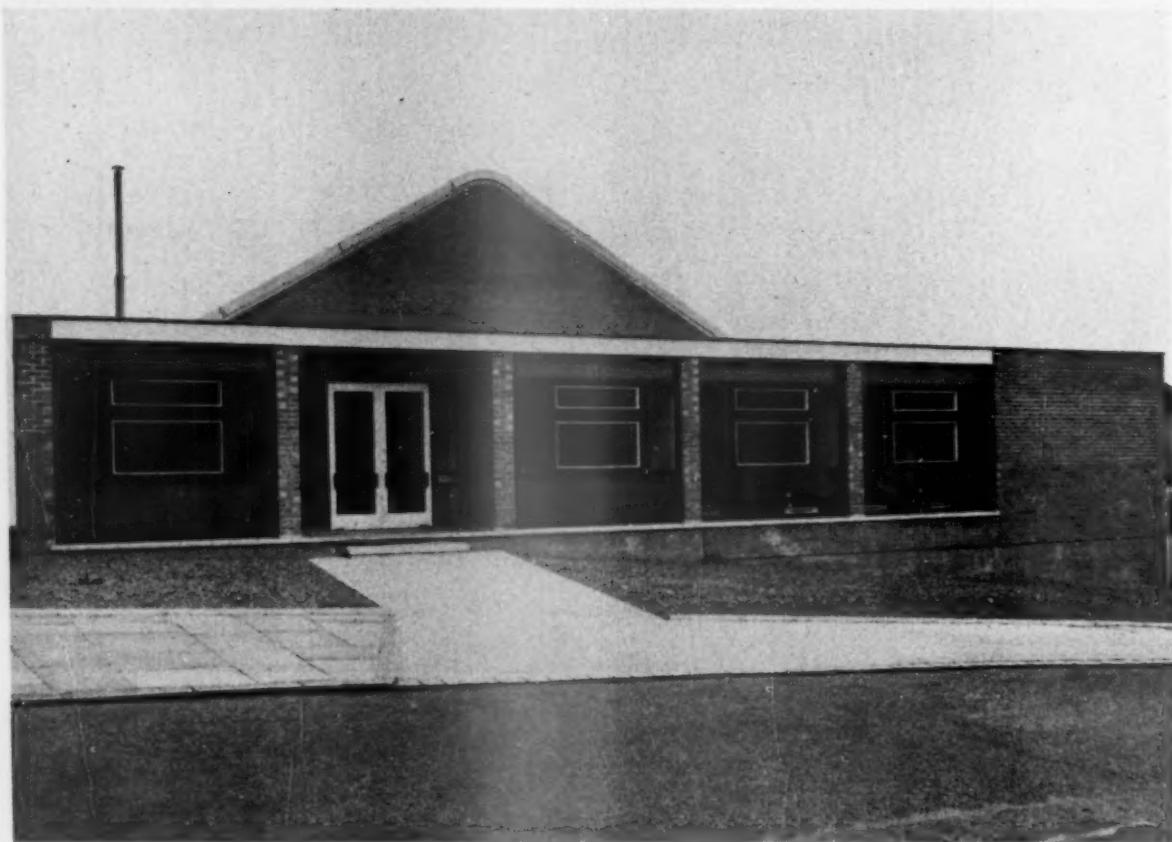
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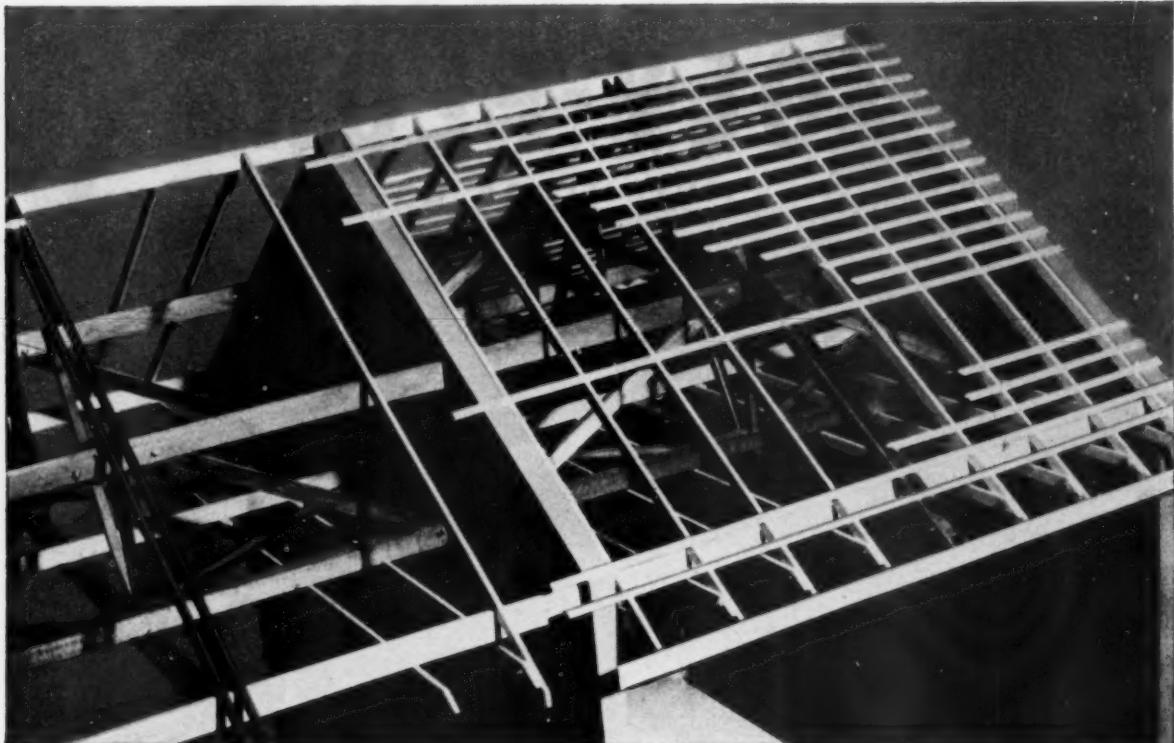


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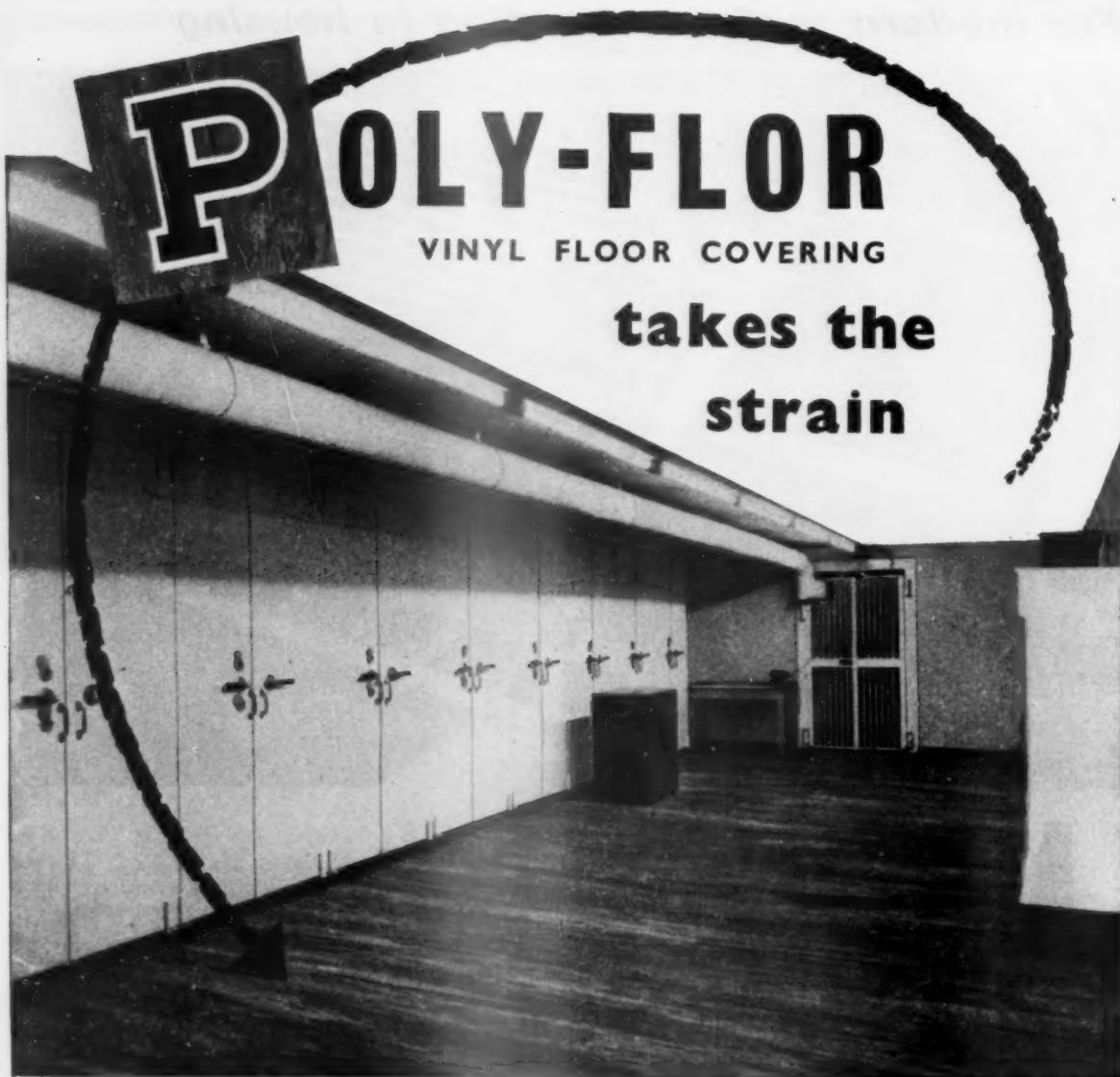
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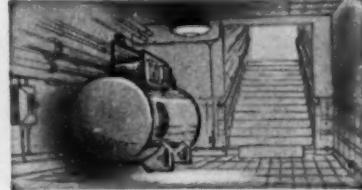
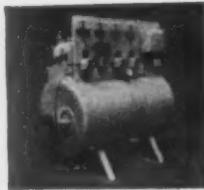
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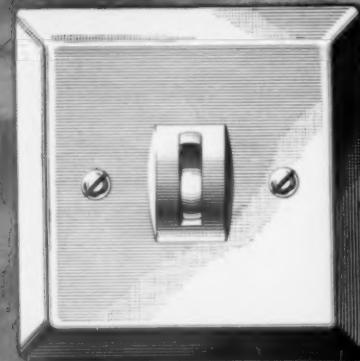
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## higher densities?

The shortage of building land is known to be very acute in most large towns. There are considerably more young families than were expected when the first Development Plans were prepared and the rise in the standard of living has led to a demand for better living conditions. This pressure in the demand for more building land coupled with its shortage has forced the price up to undreamt-of heights.

The extra cost is, of course, passed on to the consumer and newly-married couples are having to pay many hundreds of pounds more than they expected for their homes, when they are fortunate enough to find them. Many more have to live with their relations in unhappy mutual irritation.

All this has been fully reported in the national papers and is regarded as one more example of the lunacy of planners. It is becoming more and more apparent that the Government will have to do something about it. It seems unlikely that there will be any general relaxation of Green Belt policy, although the recent decision on Tyneside suggests that in approving plans the Minister may make greater provision for town expansion in some cases.

The indications are that the official answer will be an increase of density in the existing built-up areas. In the "twilight areas" the densities of the old Victorian houses are often appreciably less than the statutory density and private developers have for some time had their scouts out buying them up for assembling into larger sites potentially capable of redevelopment at considerable profit.

Some of the more wideawake local councils have been doing the same thing. There have been reports that the Minister intends to encourage the process possibly even by the offer of a special subsidy. He might also consider raising the existing statutory densities which in many areas are much too low.

Although the low density "lobby" will fume, there is much to be said for this tightening up of the existing urban structure provided it is done well so that the character of the areas are improved.

The danger is that the difficulties of assembling numbers of individual freeholds into sites large enough to develop properly will in practice lead to a piecemeal hotch-potch of individual schemes worse in many ways than the outworn Victoriana they replace. This point, no doubt, will not have escaped the Minister's sharp eye.

*On the Cover: A model of Frederick Gibberd's winning design for the Liverpool Cathedral competition*

# events and comments

*The Architect and Building News*, 31 August 1960

## A4 Digest

Building Research Digest No. 1 (second series) has just appeared. If you have opened your *RIBA Journal* you will have seen that the Digest is printed on the A4 international paper size. The BRS thus joins the top-level organizations and firms in the building industry which have changed to this series of sizes for their publications. Since the *RIBA Journal* and *BRS Digests* are now the same size, the inset does not quite fit in the Journal and the edges become crumpled in the post. This is a minor disadvantage to an otherwise welcome change. Although the number of firms coming into line is increasing daily, the changeover is going comparatively slowly. The example of the BRS will help considerably.

The new Digest is concerned with the report *Building Research 1959*, about which I wrote two weeks ago. The general layout is good and the quality of the photographic reproduction improved. The price has, however, gone up to 4d for single copies, and the annual subscription is now 6s. There are reductions for bulk orders; postage is extra. The Digest carries both SfB and UDC references and, such are the complications of our modern world, its full description includes the following SfB A. UDC .061.6 1239B Wt 34 K336 8/60 Gt. 1343 S.O. Code No. 72-36-0-1—but call it BRS Digest No. 1 (second series) for short.

## Rural industries

Among the interesting things to be found in the annual report of the Rural Industries Bureau for 1959-60 is reference to the Craftsmen Furniture Makers' Association which, with the help of the Bureau and the TDA, is putting on an exhibition at the Building Centre from September 20 to October 8. It may not be generally realized that small firms of furniture makers are not all sharing in the wave of national prosperity. Generally speaking, the skill of their craftsmen is not being fully utilized in making the high-quality furniture of which they are capable. Too many of them, says the report, are having to resort to work requiring much less skill and ingenuity. This branch of the furniture industry lacks a shop window in which to display its work, for, unlike the large firms, the craftsmen have no showrooms and cannot keep their products in the public eye by expensive advertising campaigns.

The success of this exhibition will depend very largely on the quality of design of the pieces shown. Craftsmanship by itself is not enough.

## Harlow: A Yugoslav view

My agent went with a party to Harlow New Town recently. He tells me that the new town is still getting a good quota of visitors from all parts of the world—who are, incidentally, most hospitably received—but whereas most of them used to be architects and planners, now many sociologists, doctors and educationists go to see the progress made. The doctors, of course, are specially interested in the fine health centres, which have proved so successful here that one wonders why they haven't been more widely established.

With the party was Mr. Budimir Pervan, architect-planner from Split, on the Dalmatian Coast of Yugoslavia. He has been employed with a team of architects on some most interesting restoration work on the Palace of Diocletian, and some readers may have seen his striking new light-house at Split.

He has visited the new town of Nove Chuty in Poland and has seen large-scale modern development elsewhere, and he thought Harlow compared most favourably. He was particularly struck by the vitality and attractiveness

of the town centre, and the varied design of the houses and flats, which he described as "simple yet pleasing".

Though reluctant to criticize, especially as the new town is not yet complete, he did say he felt overall densities were too low; much space—and money—might have been saved and a greater sense of urbanity and compactness achieved by building a higher proportion of flats. In his country three-quarters of the new housing was in blocks of flats.

\* \* \*

Mr. Pervan felt that one should draw a clear distinction between needs and prejudices. Much of the opposition to flats in Britain, he thought, probably arose through prejudice, because people were not being given a chance to live in really modern, well-insulated buildings, with good landscaping and so on. So long as planners pandered to prejudice, so long would the prejudice remain. He would have thought it specially important for Britain, with its acute land shortage, to try and overcome this difficulty.

He also thought Harlow could do with more points of identity. Each neighbourhood unit should have its own characteristic feature. He was glad to learn that it was hoped to meet this need to some extent under future development.

## Keeping warm next winter

The Design Centre announces an important special exhibition *Heating Your Home*. It will run from September 19 to October 29 and will illustrate appliances, 56 of them, ranging from whole-house heating devices to individual small heaters. All four fuels will be included. A background of drawings and diagrams has been prepared by a "well-known" *Punch* artist. I suppose that this means that they will be funny. I would have thought the Coid could have done without this kind of publicity. The Council is arranging to supply retailers with literature and alternative layouts for linking displays at a small fee—funny pictures and all.

## Architects and ships

Anyone who has sailed up the Medina River at Cowes lately will have noticed the two new Channel steamers being built in Samuel White's yard. One is almost due to start her trials, the other is still on the slipway. Both ships are for the Channel Islands run. The first, I understand, will be handed over this year and the second in the spring. As far as I can see, the exterior is the mixture very much as before, with few concessions to modern design, with the exception of a sloping line here and there. The interior of the completed ship has been designed by the Architect's Department of the British Transport Commission, the other is being done by Ward and Austin, who also did the motor-car ferry, *Maid of Kent*.

I shall look forward to seeing both of them, but when, oh when, are we going to have a Channel steamer which is properly designed throughout? Does the BTC never take a look at Scandinavia?

## Edinburgh goes to the contractor

The news that 9,000 flats, costing a total of £18 million, are to be designed under direct contract with George Wimpey and Co. has infuriated Edinburgh architects. It seems to be the general policy of the housing construction sub-committee that contracts should be awarded to contractors for the complete redevelopment of particular sites. The reason for this decision was recently given by

the convenor of the sub-committee, Councillor Norman Smith, as follows: "We felt that in these projects, which involve not only planning and building, but demolition or removal of the existing houses and alteration of site levels, a contractor would be better able to do the job. The contractors will employ their own architects and surveyors." This shows a pitiful and almost criminal ignorance of the architect's work and true place in the life of the community.

\* \* \*

There was an interesting letter on this question in *The Scotsman* on August 24. A Mr. P. W. Dixon wrote: ". . . it seems evident to me that, except in the rarest cases, the architect is the vital medium for achieving the client's long-term interests, and that the contractor is secondary. It would appear more reasonable to appoint an architect, with power to nominate his contractor, than to reverse the procedure. At its lowest, subordination of architect to contractor could mean subordination of client's interests to the profit motive.

"Architects can sometimes be uncomfortable bedfellows, but to hide them under the contractor's skirts seems not only unfair (which does not matter) but in the long run most unwise.

"I submit that the many of us who fulfill no permanent creative function should make special efforts to encourage and liberate those who do."

### **English Electric**

The opening of English Electric House on the site of the old Gaiety theatre has been greeted with a good deal of

**The new headquarters offices of The English Electric Group of Companies on the former Gaiety Theatre site, showing the sculptured figures by Sir Charles Wheeler, president of the Royal Academy, over the main entrance. Architects : Adams, Holden and Pearson**



justifiably unfavourable comment in the national press. You will remember that Mr. Gordon Tait's most interesting competition-winning design was dropped and that Adams Holden and Pearson were appointed to prepare a scheme after being unsuccessful in the competition.

When I commented on the perspective of the building shown at the RA this year, I mentioned the statues flanking the doorway and suggested that they were hurling down the dismembered body of the spirit of architecture. I see now that one of them is dealing with architecture and the other with sculpture. Sir Charles Wheeler must have taken his model from the pages of *Health and Strength* (see picture).

### **The Liverpool competition**

The critics have been strangely guarded about Frederick Gibberd's winning design in the Liverpool Roman Catholic Cathedral Competition. I suspect that many of them were caught on holiday by the unexpectedly quick adjudication and that others could not face the journey to the wilds of Wimbledon. They have no further excuse now, for the prizewinning and highly commended designs are on view at the Building Centre until September 17.

### **For photographers**

Trigger-happy holiday photographers may like to be reminded that they can win a first prize of 250 guineas in a competition for the best black-and-white photograph of a crane. It must, however, be a Jones crane. As a guide it is no use taking a picture which illustrates the industrial capabilities and versatility of these cranes; the manufacturers know all about them. What they want this time are pictures "in which the accent is on photographic art". Go to it, you old button-pressers. You have until December 31. Maybe you'll find a robin nesting in one somewhere. The competition is organized by the George Cohen 600 Group Ltd.

### **A small tile museum**

If you are interested in the history of roofing tiles, may I encourage you to brave the rigours of the other side of the Thames and visit the small tile museum set up by Langley London Ltd. in their showrooms in Borough High Street. If you cannot go to see the very interesting collection of relics there, but are interested in the subject, write to Langleys for a copy of their well-illustrated Historical Notes on the Langley Museum by C. G. Dobson.

### **The Cardiff hospital**

The outspoken criticism of the result of the recent Cardiff hospital competition in the *Architect's Journal* has produced some strongly worded correspondence in the *Western Mail*. Correspondents seem to agree that there should be further inquiry before the project proceeds. A partner in the winning firm, Mr. Stanley Milburn, is reported to have dismissed the criticism as the "tasteless remarks of so-called critics".

I have heard mixed opinions about the winning scheme. Some say it works, some say it does not. Everyone agrees, however, about the quality of the architecture.

### **Guinness by Games**

It is a long time since we had a poster that set people talking. Abram Games' design using the G of Guinness as the basis of a 5 for the five million that are drunk daily (Guinness, not people) is brilliant and decorative as well. Mr. Games has used the same idea on the G of his signature. I hear that leading graphic art students think that this is a bad poster because it incorporates an idea. Ah well!

**ABNER**

### Where caravans may rest

In a circular to local authorities on the control, equipment and management of caravan sites, Mr. Henry Brooke, Minister of Housing and Local Government, says the aim should be to secure that all caravan sites, whether residential or holiday ones, are properly equipped and run; that sites are not allowed in the wrong places but are allowed in acceptable places, and that planning permission is not withheld on principle but only where there is some definite planning objection; that permission is given on a long-term or permanent basis unless there is some definite reason against this; and that where sites have to be run down or numbers have to be reduced this is done with due regard to avoidance of hardship.

In future, caravan sites will have to be licensed. Existing ones which have specific planning permission must be granted licences, but the licensing authority will be able to attach conditions. In doing so, they must pay regard to model standards prescribed by the Minister, copies of which have been issued with the circular. Applications for licences for existing sites which do not have planning permission will be referred to the planning authority.

The establishment of a new site will require, first, planning permission and, second, a licence. The circular emphasizes the importance of close and harmonious co-operation between planning and licensing authorities in dealing with applications for existing and new sites.

Planning decisions on caravan sites should be taken in the light of accepted planning principles. Authorities will need, however, to consider where in their area sites would be acceptable, given the demand. The Minister cannot give precise guidance on this point, but makes a number of points which he considers noteworthy. These include: residential sites might best be outside, but not far from, residential areas; there is much to be said for concentrating holiday sites in a special locality rather than having them scattered over a wide area; new static holiday sites should be in inconspicuous places and well screened; sites should not be so small as to make a high standard of equipment uneconomic nor so large as to spoil the character of an area.

### Protecting Lakeland's beauty

The siting and control of caravans has become a special problem in the Lake District, where they can so easily spoil

*A model of the new headquarters for Essex River Board, to be built at Chelmsford by Holland and Hannen and Cubitts at an estimated cost of £290,000. Work begins on Sept. 5 and is due for completion in 18 months. Architects: E. R. Collister and Associates*



the beauty and sense of isolation that give the region its character.

In their July *News Letter* the Friends of the Lake District say that the new Act should go some way towards enabling local authorities to exercise more effective control over siting. "In the past," they state, "the somewhat leisurely procedure, which was all that was open to a local authority which wished to challenge unauthorized use of land for caravans, has failed entirely of its effect and caused much difficulty and frustration. Indeed, the various stages through which the planning authority was compelled to move meant that if proceedings were started, say, at Whitsun, the season would have virtually come to an end before action to remove the caravans could have taken effect."

"Whatever its defects in other respects, the new Act should make more summary action possible. Also, by greatly increasing the penalties for failure to comply with the regulations, it bids fair to check unauthorized caravanning, on the use of sites contrary to the conditions laid down by the planning authority. At the same time the double method of control—on the one hand by the planning authority, which gives a planning permission, and on the other by the local authority, which issues a licence—creates its own difficulties. It would be disastrous if, by reason of provisions incidental to the new Act, the control of caravans in the National Parks became even more difficult after the Bill's passage than it was before."

\* \* \*

Other matters causing concern in the Lake District, states the *News Letter*, are the growth of traffic (will the character of the area be drastically altered by wholesale road improvements?); the disfigurement of "Britain's premier National Park" by overhead power lines; the need for planning control of private afforestation; and the maintenance of footpaths crossing Forestry Commission land (a comparatively new problem for which a solution is sought).

### Edinburgh Festival opera house?

The opening of the Edinburgh Festival has seen the revival of discussion on plans for an opera house in the city, first put forward by a group of local architects four years ago as part of an ambitious scheme for a Festival centre.

Mr. Alan Reiach, a member of the group, told *The Scotsman* that the opera house should be in completely new premises, not a conversion of existing premises. It would cost about £1,250,000 to do the job properly, with a restaurant, foyer bars and other facilities.

He mentioned two possible sites. One was in Lothian Road, on the site occupied by the railway goods yard. If carried out as part of a comprehensive programme of urban renewal, the whole area could be upgraded. The site he thought most suitable, however, was that on Cambridge Street and Castle Terrace adjacent to the Usher Hall and the Lyceum Theatre. It would face Castle Rock with a broad, tree-lined boulevard on the longer side, and would be directly visible from Princes Street.

Mr. Reiach thought the design of an opera house should be the subject of an international competition.

Opposition to the scheme has been made largely on the question of cost; doubts have been expressed that such a project would be a liability on the ratepayers.

### Urban renewal in Scotland

Among major schemes of urban renewal planned for Scotland are the redevelopment of the Overgate, Dundee, and a £5 million plan for rebuilding the central area of Greenock.

The Overgate development has been approved by Dundee Town Council and is awaiting the sanction of the Secretary of State for Scotland. This scheme and the Greenock one involve the replacement of existing buildings by completely new shopping and commercial centres, with traffic segregated from the shopping areas. At Greenock 11- and 15-storey blocks of flats are included in the plan. The

Dundee development is expected to cost up to £2 million.

Ian Burke, Martin & Partners, the Dundee firm of architects and planners, have been working on both schemes in collaboration with J. Seymour Harris & Partners, London and Birmingham.

#### **Brick workers to have shorter week**

Agreements on a shorter working week for brick workers and some 50,000 employees in the electrical contracting industry were announced recently.

A London Brick Company spokesman said that the Pressed Brick Makers' Association had agreed with the unions for the working week to be reduced from 44 hours to 42 and the basic rate to go up from 4s 1d an hour to 4s 3½d. These changes will come into effect from November 7.

Under an agreement reached between the National Federated Electrical Association and the Electrical Trades Union, the workers in the electrical contracting industry will have their working week cut from 44 to 42 hours without loss of pay from the beginning of November. This brings working hours in private electrical contracting firms into line with those in the contracting departments of the nationalized industry.

#### **Surveyors' conference at Bangor**

The Chartered Surveyors' annual conference opens at Bangor today (Wednesday).

After a welcome by Professor Glyn Roberts, on behalf of the University College of North Wales, and Mr. N. H. Parfitt, O.B.E., chairman of the North Wales branch of the Institution, Sir John Wolfenden, C.B.E., will address the conference on *Educating the future citizen*.

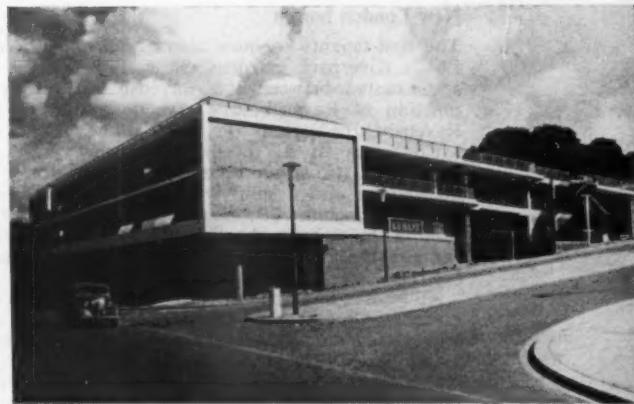
The educational theme will be stressed in subsequent talks on *Education for the professions*, to be given by Mr. A. A. Part, C.B., M.B.E., and *The Education of the chartered surveyor*, by Mr. Henry W. Wells, C.B.E.

Sectional meetings will be held on Thursday evening on agriculture, general practice, mining and quantity surveying, and the conference dinner takes place in the Prichard-Jones Hall at 7.45 (for 8.15). A feature of Friday's session will be a "brains trust" on institution affairs, presided over by Mr. H. A. Frazer, as Question Master.

There will be coach tours to places of interest, including Snowdonia, and golf competitions have been arranged for Friday afternoon. The conference Ball will be held in the Great Hall of Penrhyn Castle on Friday evening.

(more news overleaf)

**Exterior and interior views of the Palazzetto dello Sport in Rome, the smaller of the two indoor centres specially built by Professor Pier Luigi Nervi for the Olympic Games now taking place. Further details of this and other buildings were given in a review of Professor Nervi's work in A & BN on April 6**



This three-tiered car park in Hemel Hempstead town centre with parking space for over 200 vehicles is now almost completed. A feature of it is a mural with a transport theme by Rowland Emett. Architects: Fuller, Hall & Foulsham, with Raymond P. Bee as principal architect-in-charge

## **diary**

#### *The Building Centre*

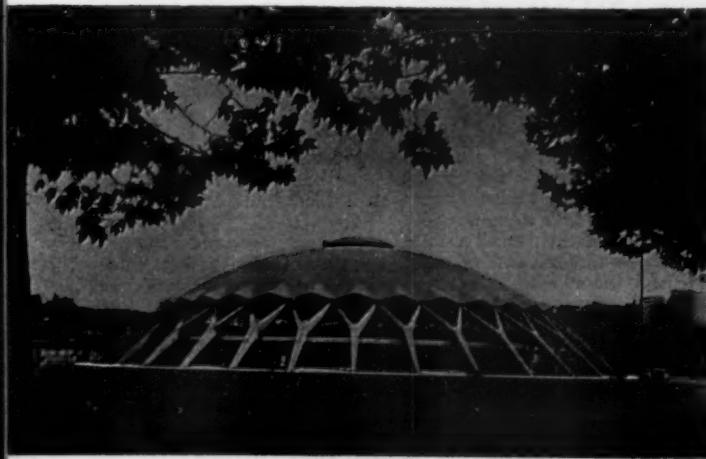
August 30-September 17. Exhibition of the premiated and highly commended designs for the competition for the Metropolitan Cathedral of Christ the King, Liverpool. Weekdays 9.30 a.m.-5 p.m. Saturday 9.30 a.m.-1 p.m. At 26 Store Street, W.C.1.

#### *Royal Institution of Chartered Surveyors*

August 31-September 3. Chartered Surveyors' Annual Conference at the University College of North Wales, Bangor.

#### *Joint Committee on Structural Concrete*

September 17-25. Visit to Italy to inspect old and new architectural and structural work of outstanding interest.



### New London homes

The first tenants are now moving into new homes at the LCC's Riverpark Gardens estate, Lewisham, a three-acre site situated between the Ravensbourne River and the junction of Ravensbourne Avenue and Crab Hill, near Ravensbourne station.

Consisting of 51 dwellings, the new estate has four terraces of two-storey houses, three four-storey blocks of maisonettes and a shop with a flat above. The development also includes 22 tenants' stores, a small estate workshop, a transformer chamber, 13 garages and an area for car parking. Total cost of the scheme is estimated at £160,000.

All houses and four of the lower maisonettes will have gardens. A number of heated drying cabinets are being provided for tenants in the maisonette blocks who have no outside facilities for drying clothes.

The first dwellings to be completed are four-storey maisonettes; the remaining ones will be finished shortly. Constructional work is being carried out by Carlton Contractors Ltd., under the supervision of Hubert Bennett, architect to the LCC.

### Town planning inquiry wanted

In a memorandum to the Minister of Housing and Local Government, the TUC General Council is proposing the establishment of a royal commission to inquire into the machinery for town and country planning in the light of future needs.

The Council also suggests that an immediate start be made on building more new towns, and that the Government should encourage the expansion of existing towns by bigger financial incentives. Furthermore, the TUC wants the practice of charging betterment to be restored; land should change hands at existing use value, they say.

The Government should help local councils to buy town land for comprehensive redevelopment and encourage them to undertake profit-making enterprises.

### The late O. E. Parratt

Mr. Oswald E. Parratt, F.R.I.C.S., who was quantity surveyor for most of the buildings at Harlow new town, died last week at the age of 75, only a few months after celebrating 50 years in private practice.

Active in his own firm until his death, he retired only recently as managing director of London City Buildings Ltd. Besides his work at Harlow, he was also associated with new housing schemes at Lewisham, Islington and Camberwell.

He was also quantity surveyor for many well-known London buildings, including Unilever House, Adelaide House, the new Queens Theatre, the Westbury Hotel, the Time and Life building, the Tivoli site in the Strand, and the Associated Electrical Industries building in Grosvenor Place.

During the war he was quantity surveyor for Vickers Armstrong on shipyard work at Newcastle upon Tyne.

### £230,000 extensions for Glamorgan college

The Glamorgan College of Advanced Technology at Trefores, Pontypridd, is to be extended. The county council has awarded a contract worth £230,000 to J. Gerrard & Sons, of Swinton, Lancs., for the work, which will take two years to complete.

It will comprise the construction of two large extensions to the north and south ends of the existing School of Mines, together with an independent boiler house. The south extension will be an administration block and the north extension a teaching and chemical engineering block.

The administration block will be a traditional structure with steel frame encased in concrete, brick cladding, hollow tile floors and patent roof decking. The building will be on three levels consisting of lower ground floor, ground floor and first floor, rising to a maximum height of about 50ft above ground level with a basement 6ft below ground level.

The teaching block will be a three-storey building in traditional style, rising to a maximum height of about 35ft above ground level, and of similar construction. The chemical engineering block will be single storey, again traditional, with a 50ft tower and a steel frame with brick and asbestos cladding and patent roof decking.

These extensions have been designed by the Glamorgan county architect, Mr. Evan Arthur Edward Evans, and the quantity surveyors are Davis, Belfield and Everest of Newport, Mon.

### London Transport appointments

Mr. G. C. Manly, L.R.I.B.A., and Mr. A. D. McGill, A.R.I.B.A., have been appointed principal executive assistants in the Architect's Department, London Transport, each with the title of principal assistant architect.

Mr. Manly, who is 56 years of age, joined the architect's office of the Underground Group of companies in 1931. He was appointed senior assistant architect in 1948, since when he has been concerned with such major works as the new Upminster Depot, the Metropolitan Line improvements at Amersham, North Harrow and Moor Park stations, and Bank station reconstruction.

Mr. McGill, who is 55, joined the architect's office of the Underground Group of companies in 1931. He was appointed senior assistant architect in 1949 and has recently been engaged on work with various new projects, including the Notting Hill Gate station reconstruction, the Acton Apprentice Training School, and the Metropolitan Line improvements at Pinner and Northwood stations.

### Three million visitors

The Design Centre in Haymarket, London, has welcomed its three millionth visitor. Opened by Prince Philip at the end of April, 1956, the Centre has had an average daily attendance of 2,250, surpassing the most optimistic forecasts. While the Picasso Exhibition at the Tate Gallery has been drawing an average daily attendance of 5,499, an average of 3,308 people have visited the permanent exhibition of well-designed modern consumer goods. Over 1,000 items are on display at any one time and photographs of another 10,000 can be seen in design index.

A total of 57,922 inquiry cards asking for further information about products have been completed, including 7,665 trade cards. The information desk receives a variety of inquiries daily, among others: "Can you tell me where I can buy a straw hat dye?", and a lady who telephoned recently: "I hear that there is a lot of trouble brewing between Russia and America—can you give me the latest details?". Other visitors have praised the elegance with which the goods are displayed and one expressed his appreciation in a manner new even to The Design Centre: a teapot disappeared from the exhibition some months ago. The shattered remnants have just been returned—postmarked Stuttgart—with a polite note saying: "Many thanks for this teapot. I have taken with me the pot last year".

### A new look for 'The Times'

A piazza and an underground car park are included in a scheme for the reconstruction of *The Times* buildings in Printing House Square, near Blackfriars Station, London (*pictures opposite*).

Around the piazza, eight-storey offices will be built at an estimated cost of over £1 million, under the first stage of the scheme. A second block, costing about £500,000 will be provided later and may be let to other newspapers for office accommodation.

The buildings will be finished partly in green in Westmorland slate, and there will be a sloping roof of copper sheeting.

Ellis Clarke and Gallanagh are the architects, in association with Llewelyn Davies and John Weeks, and the work is being carried out by Trollope and Colls.

In which John (A.R.I.C.S.) and Tony (A.R.I.B.A.) continue their discussion on estimating begun in A. & B.N., June 22

ANARISC

They were back in the clubhouse after 16 holes. John had torn up their cards somewhere near the fourth, lost two balls and found one which a dog wouldn't have putted with; Tony had been out of bounds three times, had a flukey birdie, lost four balls, found none, broken three plastic tees and found two of those dirty yellow wooden ones. They had seen a hare and heard a cuckoo—altogether a satisfactory evening away from the kids who do not get to sleep early these light evenings. John was speaking.

"I wouldn't say that it is common practice for the builder's surveyor to do a valuation and to present it to the quantity surveyor for checking. The best that the quantity surveyor can hope for on the average contract is that his opposite number has put in a few hours' preparatory work on the certificate assessing the state of the job, the materials on site, sorting out claims from nominated sub-contractors and suppliers and warning the tea boy of the two additional chipped enamel mugs that will be required."

"So you don't do a valuation by saying, 'This job is

40 per cent complete, so I'll recommend the architect to pay 40 per cent of the bill figure?'"

"I've never heard of this being done. It would be very dangerous."

\* \* \*

"But surely the worst that can happen in a certificate is that you overpay the contractor. Does this really matter?"

"It matters very much as a point of principle. We are paid to give a fair valuation of the work done. In practice, admittedly, if we do slip up and over-certify one month the mistake can usually be righted four weeks later. The danger, of course, comes when the contractor goes bankrupt, then the quantity surveyor is in trouble if he has already been paid more than the value of the work done. One should try to do a certificate on the assumption that the contractor will declare himself bankrupt the day after he has received the money from it—rather as a good driver enters every corner as though there were a car approaching from the other side. There is a certain amount of hidden wisdom in this, by the way, because if a builder is about to go into liquidation he will probably delay doing so until conditions are as favourable to him as possible, and the payment of one or two sizeable sums from valuations will do something to strengthen his hand at the meeting of creditors."

"So you do a valuation trade by trade?"

"Exactly. You look at the first page of the Excavator bill—strip site—done—you write down £80—whatever. Some items may be only part complete, in which case you assess a percentage value. Some pages or, later in the job, some whole trades, you may be able to include complete after deducting provisional amounts. With the more expensive work however—brickwork for example—it is often wiser to measure the work completed, adding a percentage allowance for labours."

"To return to the Excavator. Do you measure planking and strutting when it has not been found necessary?"

"Yes. The contractor's price for planking and strutting is an insurance more than an evaluation of labour and material required, and if the contractor elects not to plank and strut and his trenches don't cave in, this is his good fortune. But, mind you, there have been many cases of builders losing heavily on this risk of planking and strutting and many a builder will tell you that if a job doesn't make a profit while it is 'in the ground' it will never make one."

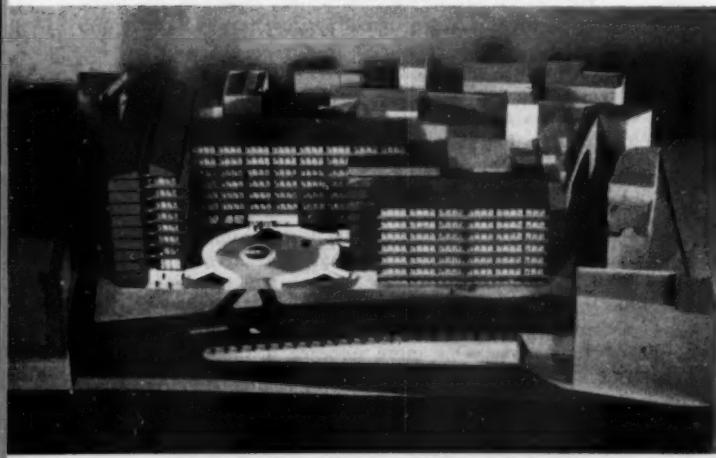
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"How many hours does a valuation take?"

"This depends, of course, on the size and state of the job. The first certificate is normally a quick one, being concerned with just the early trades. The last, or rather the penultimate certificate, can usually be completed fairly quickly although, at this stage, you suffer agonies at the thought of possible overpayment and you usually take extra care—particularly with the assessed figures as opposed to the 'measured' ones. I suppose valuations done at the half-way stage are the most tedious. You then have all trades to deal with, probably a good number of variations to allow for, interim payments to most of the nominated sub-contractors and nominated suppliers and a good pile of materials on site to check."



Work on the reconstruction of The Times building in Printing House Square will soon be in full swing. Above, the building as it looks at present and below, a model of the proposed development (story opposite)



"How do you deal with nominated sub-contractors and nominated suppliers?"

"The contractor normally brings with him any requests for payment he has received. As you know, under the R.I.B.A. Form of Contract, nominated sub-contractors and nominated suppliers are as different as fish and fowl. The nominated supplier is entitled to payment from the main contractor within 30 days of the end of the month in which delivery is made. This payment is in full, less only five per cent cash discount for payment within that period. Naturally, the contractor does not wish to lose this discount even if it means paying the nominated supplier before he receives payment for his goods in a certificate. The contractor is not entitled to hold retention on nominated suppliers' accounts although, of course, the employer will withhold retention on this money in the certificate. All this is of little worry to the quantity surveyor, he has merely to satisfy himself that the nominated supplier's claim is fair in which case his account is included in the valuation.

"The nominated sub-contractor presents a different problem. The R.I.B.A. Form states that nominated sub-contractors are to be paid by the main contractor the value of their work executed, less retention and less two-and-a-half per cent cash discount if payment is made within 14 days of the issue of the architect's certificate. So the contractor need not pay the nominated sub-contractor as soon as he receives his claim and he may deduct retention on his account when he does pay him. With nominated sub-contractors, in fact, the contractor is not out of pocket on retention, with nominated suppliers he is. On the other hand, because he has either paid or is about to pay his nominated suppliers, the contractor is always careful to see that their accounts are included by the quantity surveyor in each valuation. With nominated sub-contractors' accounts it is my experience that he is inclined to be a little more casual. He tends to toss you a couple of invoices saying 'I've had these two claims from Jones and Smith for ten thousand and twenty thousand, what shall I put in?'"

\* \* \*

"This means that you have to value the work of nominated sub-contractors?"

"Yes, which isn't always easy, unless you have a consultant to tell you what figure to include. In dealing with nominated sub-contractors, of course, the quantity surveyor must remember that the same danger of bankruptcy exists with them as exists with the main contractor. He must be careful not to overpay them and he must be careful not to pay them in excess of their quotation without good reason—without a variation order, in fact. And, of course, one must allow for any variation orders which reduce the scope of their work. Nominated sub-contractors have a habit of sending in a final account inclusive of all kinds of extras and few omissions. The quantity surveyor must satisfy himself that both extras and omissions are correct. I once included in a valuation a figure for linoleum flooring which was well within the quotation figure but which was, nevertheless, an overpayment because purchase tax on linoleum flooring had been reduced since the date of the quote. Although most sub-contractors would have made allowance in their account for this reduction, this one left me to find out about it and to make the necessary adjustment. I didn't find out in time. This was not a fixed price contract of course."

"So the sub-contractor was overpaid?"

"In this case he was overcertified but not overpaid. The 10 per cent retention which the main contractor held on his account covered my indiscretion and all was well. Had he been overpaid the main contractor would have had to

ask him for a credit."

"Which he would have received?"

"Almost certainly. Only a foolish sub-contractor would try to hang onto money which could be proved to be not his due—but, again, in the event of the sub-contractor going into liquidation, the main contractor would lose money. For this he could rightly blame the quantity surveyor."

"I believe you have to see proof of previous payments to nominated sub-contractors?"

"Yes, this is very important. There is a danger of a contractor who is passing through a period of financial embarrassment holding onto payments made to him in respect of nominated sub-contractors. It does happen. When he is broke even a white man will turn nasty."

\* \* \*

"What proof do you ask for?"

"Best of all a receipt, failing that most architects are content for us to accept copies of a receipt or, in these days of cheques being their own receipts, a letter stating that payment has been made. We always state in our recommendations for payment what amounts have been included for nominated sub-contractors and, of course, if proof of payment of previous sums has not been given, we inform the architect so that he can, if he wishes, pay direct."

"How do you allow for Preliminaries in valuations?"

"If individual items have been priced each can be treated on its merits. If the contractor has included a lump sum we would take a proportion of it according to the value of the work done. Contractors sometimes suggest that this proportion be on a time basis but this is dangerous because if he is allowed an extension you may find that the value of his Preliminaries is included in full long before he completes his work."

"And materials on site?"

"You hope to be presented with a list of these which you can check. Failing that you write the list yourself. I am usually careful to allow the builder's surveyor to judge the tons of sand and thousands of bricks—although one can probably check these from delivery notes or by such rules of thumb as four hundred stacked bricks per yard cube. You must be careful not to list as materials on site any goods which you may have included against nominated suppliers."

\* \* \*

"Dayworks?"

"We merely include the contractor's claim, having made sure that his sheets are signed by the Clerk of Works and that none of his Daywork items is measurable. My experience has been that builders inflate Daywork sheets on principle. When you tell them that an item is measurable at *pro rata* bill rates they smile charmingly and say 'Of course, but I asked the foreman to keep records to give us a guide when it comes to pricing the final account. We don't want to be out of pocket'."

"To which you say?"

"We say 'I'll pay you in the final account at *pro rata* bill rates because that is what the contract requires. Whether you are out of pocket or not is your worry and not my business'. We say this very politely, of course, because we are professional chaps. Have another drink?"

"Not for me. One more sixpence in the fruit machine and I must go, I've only got a 10 o'clock pass tonight. I meant to ask you something about final accounts but there's no time now. Next week you and Mary must come round one evening."



Following last week's illustration of the three premiated schemes for the design of a new Metropolitan Cathedral of Christ the King at Liverpool, we now give more comprehensive detail of the winning schemes together with brief illustration of those commended. We start with a criticism by Keith Scott, M.Arch. (M.I.T.), M.A., B.Arch. (Hons. Liverpool), Dip.C.D., A.R.I.B.A., A.M.T.P.I.

First premiated design (£5,000) Frederick Gibberd. Second premiated design (£3,000) C. H. R. Bailey. Third premiated design (£2,000) Arthur Bailey. Highly commended designs: Tom Hancock; Norah Glover in collaboration with Z. Borys; Raglan Squire and Partners; John H. Jakob and Anthony C. Adcock; Michael Jerome; Clive Entwistle. Commended designs: Edward Hartry of Wells, Hickman and Partners; Gerald Howes and Peter Eiseman; John Ashworth; Peter Dickinson and Associates; George P. Buzuk; Andrew Jackson; John G. R. Sheridan and Bruno Fedrigolli; Lewis S. Ash; Guy Morgan and Partners; J. R. Gradige and Peter Jameson and Associates; Michael N. Clinton; Patrick J. Quinn.

AFTER what many observers feel to be the tragedy of the Cardiff Hospital Competition, there is bound to be the keenest interest in the jury's choice of a new cathedral at Liverpool, for the competition system itself was to some extent on trial.

It is initially, therefore, a great relief to be able to report an acquittal and to greet Frederick Gibberd's design with praise as a scheme of great merit.

The design of a cathedral to seat 3,000 people is an extraordinarily difficult task to set a contemporary architect, for he must undertake it in, as it were, a vacuum if he decides to make any attempt at expressing the materials, techniques and religious thought of his day. This is particularly true in Great Britain which has a deplorable record of new church building of all denominations since the war.

There was also a planning problem to be solved in that the condition's most rigorous stipulation was that every member of the congregation should have a clear view of the High Altar, and in his introductory letter to competitors Archbishop Heenan drew attention to the increasing trend to bring the worshipper ever closer to the High Altar.

This condition of proximity leads logically to the "church in the round" in that seats ranged all round the altar guarantee minimum radial distances, and thus it was to be expected that the great majority of competitors would join the race to achieve such minimum distances.

Unfortunately, the more nearly the seating completes a circle, the greater become a number of problems. The most important of these are as follows:

- 1 Liturgical difficulties for the ecclesia.
- 2 Distraction problems for the congregation who may be made conscious of other worshippers by the plan's curvature, and who may even see people across the Sanctuary.
- 3 Planning problems on the Sanctuary in that the 20 cannon stalls and the Archbishop's throne must not

impede the view of the High Altar, and yet must be on the Sanctuary.

4 It becomes increasingly difficult to site the pulpit, so that it does not obstruct the Altar while remaining in view of the congregation and fulfilling the condition of not being on the Sanctuary.

5 An aesthetic problem of focus in that just because lines are drawn to the centre of a circle in the form of aisles, etc., it does not necessarily mean that the eye will follow them, for it is more dominated by spatial flow than by surface linearity.

#### The winners solution

That the winner is one of the most extreme solutions in this circular disposition of seating shows how far the assessors have overridden its limitations in favour of the benefits of the added sense of corporate worship which it undoubtedly imparts.

From the standpoint of basic plan considerations, therefore, the scheme will have many well-informed detractors, not least because the most advanced Roman Catholic thought in France and Germany (where great developments have recently taken place), has turned away from the winner's plan form for the reasons set out above.

This cannot be held a criticism of the winner however, for he has accurately gauged the assessors' requirements by reading between the lines, and those who worried too much about the implicit drawbacks and reverted to more traditional plans have now ample time to regret their mis-spent philosophy and can brood at leisure upon the new cathedrals at Coventry and Liverpool, which when built will represent extreme poles of church planning thought.

Indeed, comparisons between the two schemes will inevitably be made, and while listing the drawbacks of the circular plan at Liverpool it should be remembered that when seating 3,000 people, no one will be more than 70ft from the Sanctuary rail, while at Coventry the back rows of only half that number will be well over twice the

distance away. This is surely important in an age when something drastic must be done to bring people closer to the central mystery of faith which the Christian religion proclaims.

What is worrying to anyone who has studied the problem of church planning is the assessors' unwillingness or inability to pick a scheme which at least reflects some of the planning successes on the continent where a number of examples show solutions which avoid the remoteness of Coventry and the visual and liturgical confusion at Liverpool.

The winner's plan should, therefore, be studied with these factors in mind. Proximity has been achieved to a remarkable degree and only experience of the completed building will tell whether the considerable sacrifice of other desiderata is justified. The winner will presumably work hard to minimize the worst defects. The pulpit for instance seems to be in a totally unsatisfactory position if there is to be any accent at all on the "preached word" from it, and in spite of the nearness of the altar there is much more to distract the eye than at Coventry where there is literally nothing else to see other than the altar when the worshipper is in his seat.

For the remainder of the plan's components there can only be praise for its deceptive simplicity. The envelope of the main building completely encloses all the many smaller units such as the baptistry, lady chapel, altar of the Blessed Sacrament, eight small chapels, subsidiary porches, etc., so that externally the dominating expression is that of the central Altar of Christ the King below the vast coronet raised high above the Sanctuary.

The external difficulty of focus and orientation with a circular structure has been solved by making a very dominant feature of the porch which is raised as a triangular structure from a square base and which houses the bells. The boldest stroke, however, is the solution to the problem of the existing crypt, and a historical note may perhaps explain its presence.

continued on page 266

**Criticism continued**

Roman Catholicism has long been strong in Liverpool and is fed from Ireland by a steady stream of immigrants. The Liverpool Archdiocese eventually bought nine acres of land occupied by grim workhouse buildings in 1928 and the newly succeeded Archbishop Downey appointed Sir Edwin Lutyens to design a truly colossal Cathedral. In 1933 the foundation stone of the crypt was laid. Even in those days the cost was conservatively estimated at £3,000,000, but during the next 25 years, as the building of the enormous crypt at the north-east end of the site dragged on, the cost rose astronomically to £27,000,000 and the pseudo-Renaissance edifice with its 172ft diameter dome clearly became impracticable.

On Lutyens' death, Adrian Gilbert Scott was appointed by the now Archbishop Godfrey to design a lesser structure in the same style but in 1957 Archbishop Heenan succeeded and he boldly decided that a fresh start should be made retaining only the Lutyens crypt which was nearly complete. Competitors were therefore confronted with this huge edifice partly submerged but standing 12ft above ground level on all sides. It was permitted to build either directly on the crypt or to avoid it completely—provided processional ways were made from the cathedral to the crypt.

Most competitors avoided the crypt and the great majority achieved a successful link by elevating the altar to the piazza level and putting the body of the cathedral on the lower levels to the south. Gibberd, however, has been much bolder. He has continued the piazza southwards, and set the cathedral on it so that the whole edifice is on a huge podium which could contain upwards of 20,000 people all served by loudspeakers on great ceremonial occasions. Raising the level of the cathedral means also that vehicular access is obtained to the lower level of the porch and all car parking is tucked neatly away below the building. Not many schemes have dared this much—not necessarily because they lacked the imagination but because they feared the cost of its construction. One must hope that the winner is sure of his pricing of this feature and that no further financial embarrassment bedevils the building of the cathedral.

A storm, one supposes, will inevitably break over the external elevations. Its detractors will say that its naive symbolism is too obvious and contrived in the most elementary way. This is surely a matter of opinion and in the last analysis it is a delight to come up against a church design which even the most scurrilous secular press reporters have not yet had the face to call a "jam factory" or an "aircraft hangar"—it could only be precisely what it is. The design's most ardent admirer, on the other hand, could not claim for it any indigenuity with the north of England and it will stand in violent contrast to even the most exotic of the new university buildings nearby.

**Detailed criticism**

There is more fruitful food for discussion in the detailed design of some of the minor elements. The entrance unit for instance is a very imaginative exercise, but is its vaguely Aztec quality in harmony with the main building—or, indeed, should it, or is it intended to be? The irregular side chapels show great possibilities on plan but will the author prove equal to sorting out the confusion that results on the elevations? Reliance upon the unifying effect of the materials is clearly insufficient. There is no point in arguing about the appearance of the Presbytery because competitors were only given a global area of 6,000 sq ft and asked to show it in block form. One can, however, regret the fact that the rather crudely contrived link corridor to the cathedral seems to eliminate the possibility of walking right round the building. One can safely forecast some unseemly, albeit muttered, language from sightseers (at least!) unless the architect can design his way out of that one.

The winner, along with many competitors, succumbed to the temptation of putting an outside altar against the north-east wall of the building with the result that worshippers look into the sun.

Turning to the structure there are a number of points worthy of attention. In the first place, in contrast to many reports, there is surely only the most superficial similarity to Niemeyer's cathedral in Brazil. The entire structural analysis is different and equally valid. Indeed, one of the most pleasing aspects of the scheme is its structural simplicity, and for this alone one is grateful for its preference over 60 per cent of its competitors.

The degree to which its skeleton is exposed, however, gives cause for concern, for unless the author intends to clad the concrete with more durable materials the BRS has warned us that heavy and unsightly maintenance can be expected in two or three decades. Similarly the filigree metal work of the crown is notoriously suspect in heavy industrial atmospheres, and one wonders whether the assessors paid any attention whatever to their request for consideration of maintenance in their exhilaration over the scheme's intrinsic clarity.

Another point to which one looks forward eagerly for further explanation is the actual execution of the coloured glass sets in concrete in the tower. This will be by far the largest work of its kind in the British Isles, and one thinks in vain for the name of a British artist who is technically capable of handling the job. Even on the continent, one of the largest applications is at the little chapel at Audincourt and there the glass is 2in thick rather than 1in as specified for Liverpool by the author at his Press conference. Here again the weathering problems are formidable to say the least.

**Other schemes**

Although the winner can be criticized in many ways there are equally strong, often more powerful, drawbacks in other schemes—particularly those commended by the assessors. For many, the poetic sweep of the lines of the second scheme will be more attractive than the stilted angles of the winner. The architectural possibilities are perhaps limited to what one sees on the drawings and the detailed sheet holds out little hope of any sensitive handling. The assessors' implied criticism of its Utzon inspiration is, one feels, uncalled for. This striving for ingenuity for its own sake is depressing and we can be thankful that this spirit did not motivate any of the great historical styles (until they had passed their zenith—which heaven forbid we have reached in the twentieth century!).

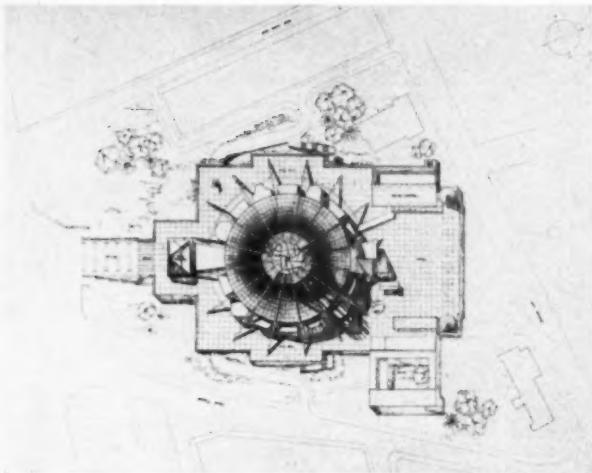
For at least one observer therefore the remaining commended schemes are a motley selection, the only apparent criterion for success being the degree to which modern materials have been tortured into an extremity of anguish, with scant heed being paid to the spirit of the conditions and frequently none at all to the requirements of the liturgy.

This is actually true of the third premiated scheme. Even the assessors boggled at its agonized structure and quite how the author intended the Mass to be celebrated (or the financial limit to be contained) will fortunately remain a mystery. Contrary to the assessors' opinion, it has an air of monumentality however: this is completely lacking in such schemes as 291 (Tom Hancock) which although solving the problem of internal focus is too parochial in concept and, through building entirely on the crypt, ignores the drama of the site.

Another commended competitor who built on the crypt is No. 203 (Gerald Howes and Peter Eiseman) and they complicated matters by producing an almost unelevatable plan. Some of the most interesting experiments were to be seen amongst those who produced a circular plan and tried to solve the problem of internal focus by moving the High Altar off centre towards the north-east perimeter. Among the best of these was No. 15 (Clive Entwistle) which produced an orderly plan of distinction and clarity, but none were able to resolve the building externally with the monumental dignity of the superb little chapel at M.I.T. by Saarinen. The sheer enormity of the distances to be spanned seemed to induce all adherents of this plan to produce quite frightening and totally inappropriate elevations. In fact the Vitruvian concept of "Delight" is the most conspicuous absentee along the 1½ miles of drawings lining the walls of the Ursuline Convent at Wimbledon.

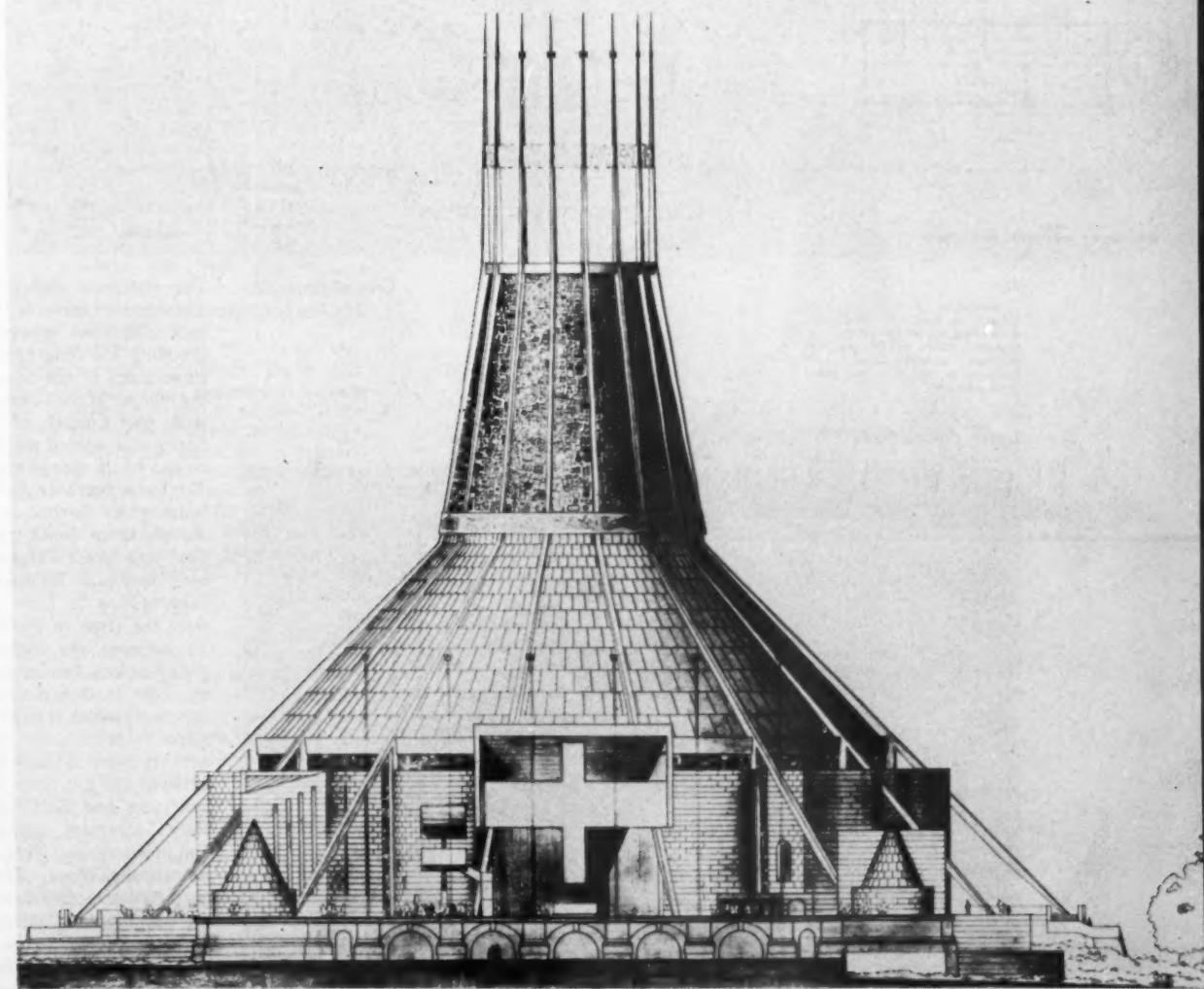
KEITH SCOTT

First premiated design by Frederick Gibberd (No. 253)



Site plan

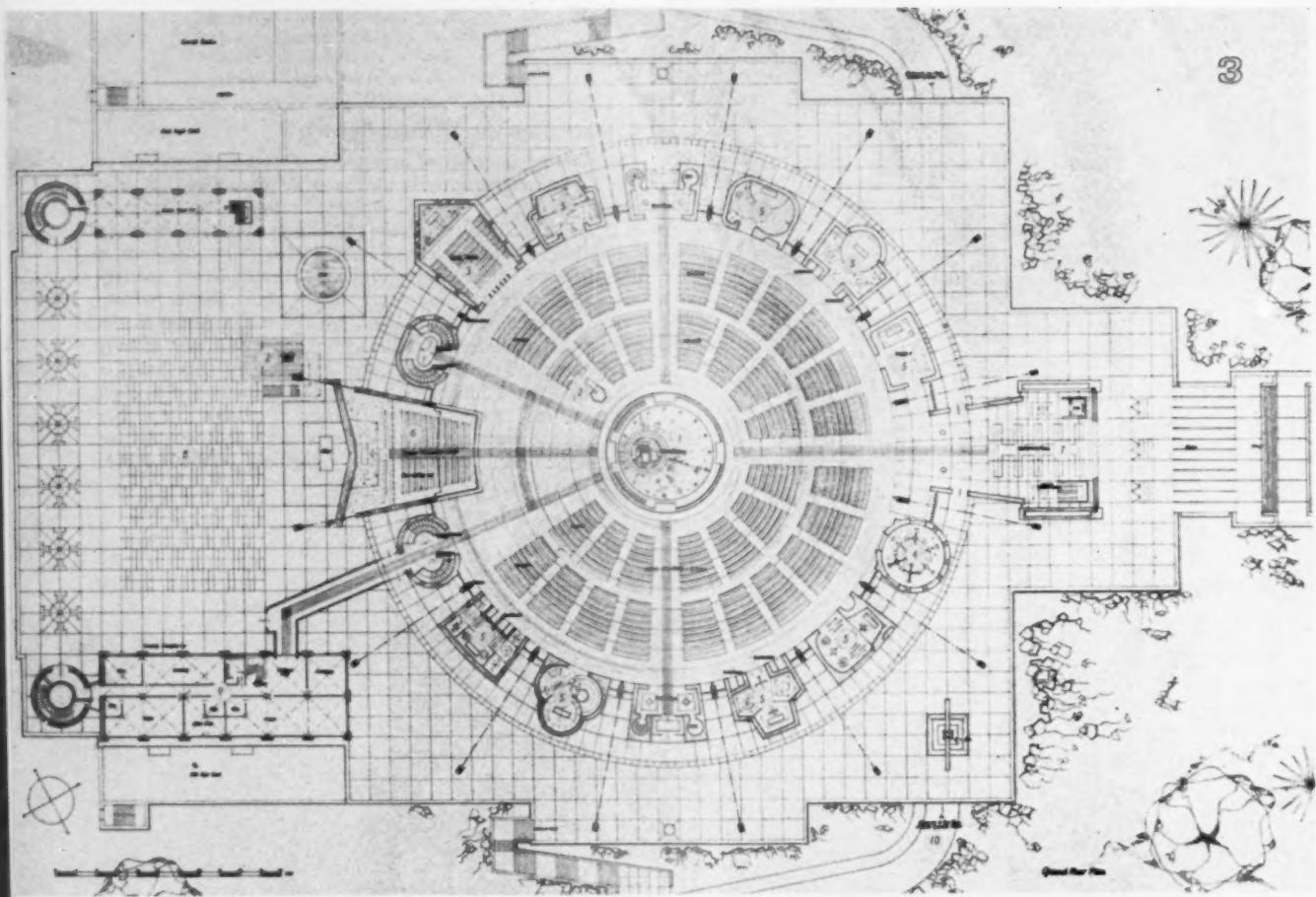
North elevation



#### Extract from the Winners Report:

The building is designed as a place of corporate worship in which the congregation is at one with the clergy. It is a liturgical space. All is directed towards an intimate association of the laity with the High Altar. The overwhelming significance of the celebrant of the Holy Mass demands a concentrated plan form with the participants closely associated with the Sanctuary rather than shapes which, however splendid in themselves, put the congregation in the position of spectators of liturgical action. The plan form is a polygon with the Sanctuary as its fulcrum. Spatially, a cylinder with the Sanctuary in the centre is developed through a conical roof to the tapering cylinder of a tower, in such a way that the most significant space and the most expressive construction occur over the most significant religious place.

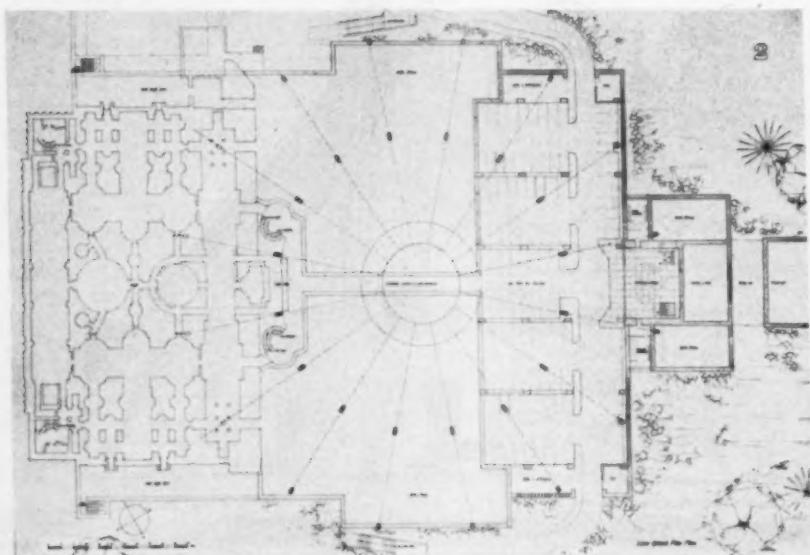
## First premiated design



## KEY:

1. Sanctuary.
2. Pulpit.
3. Lady Chapel.
4. Baptistry.
5. Chapel.
6. Blessed Sacrament Chapel.
7. Entrance Porch.
8. Piazza.
9. Ancillary accommodation.
10. Entrance to car park and lower ground floor.

## Lower ground floor



Ground floor plan

The liturgical difficulty of the circular plan form, in that it may lack direction, is overcome by grouping the congregation round three sides of the Sanctuary—in the manner of the Greek theatre—with the Chapel of the Holy Sacrament behind the High Altar on the North side of the Building. The main Entrance Porch on the South gives further emphasis to the North to South axis, whilst East and West Porches form a secondary axis. No member of the congregation is more than 70ft from the steps to the Sanctuary. To increase the immediacy by giving a clear, uninterrupted view, the floor is dished down to the Sanctuary which is itself raised on steps. The circular plan form, with its North to South major axis between the Entrance Porch, the Sanctuary and the Chapel of the Holy Sacrament, gives a clear and decisive significance to the Processional Ways. This precise, geometric structure is raised above the irregular and untidy environment by placing it on a large, rectangular podium formed by extending the Crypt roof

### Assessors' Report

If the list of commendations seems unduly long, the gratifying reason is that no less than 298 designs were submitted. The Assessors have given special mention to so many designs because these were outstanding in an entry of exceptionally high standard.

The main challenge of this competition lay in the problem of marrying the existing Lutyens Crypt to an entirely new building. The difficulty was increased by the comparatively low price limit of £1 million. Competitors, for the most part, showed great ingenuity in their solutions.

#### Premiated Designs

*The winning design* (No. 253) was, in the view of the judges, clearly ahead of the field. The design is full of imagination and powerfully expresses the Kingship of Christ. The conception is itself a crown and the suggestion of the crowning glory of Christ is revealed in the details of the building with logic and restraint.

Each chapel has a distinctive design giving it character without detracting from the majesty of the main body of the building. The whole space is dominated by the High Altar set in a generous sanctuary lit by scintillating coloured light from the tower. The siting of the Blessed Sacrament Chapel is especially happy and the visitor will be left in no doubt that this is a temple built to the honour of Christ the King.

The plan meets all requirements with deceptive ease. The extension of the piazza above the Crypt is a brilliant solution to the problem of establishing some sort of unity between the old and new buildings.

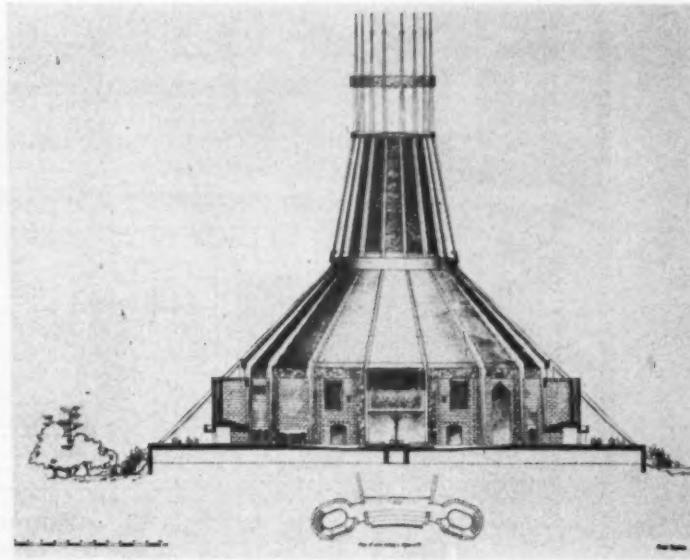
The author in his own report discloses the intentions behind the design:

"The building is designed as a place of corporate worship in which the congregation is at one with the clergy. It is a liturgical space. All is directed towards an intimate association of the laity with the High Altar.

"The liturgical difficulty of this circular plan form, in that it may lack direction, is overcome by grouping the congregation round three sides of the Sanctuary—in the manner of a Greek theatre—with the Chapel of the Blessed Sacrament behind the High Altar on the north side of the building.

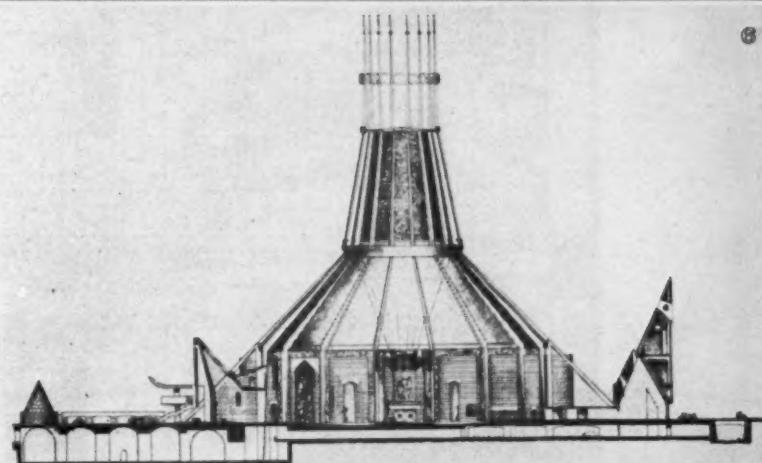
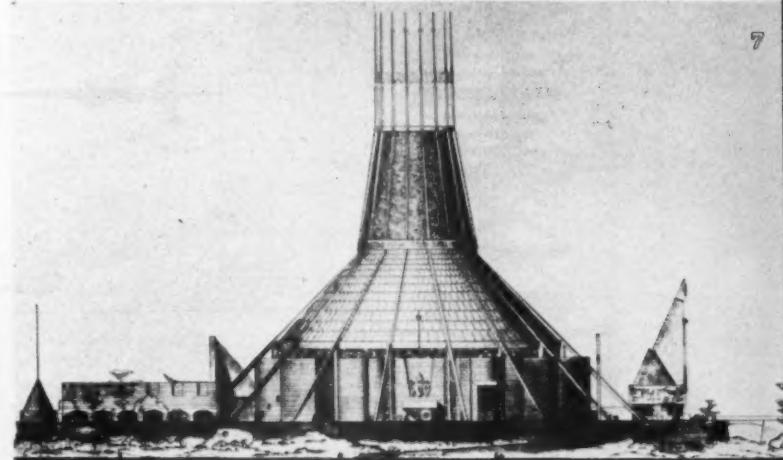
"No member of the congregation is more than 70ft from the steps to the Sanctuary. To increase the immediacy by giving a clear, uninterrupted view, the Derbyshire marble floor is dished down to the Sanctuary which is itself raised on steps.

"A purely intellectual exercise in structural mechanics could produce the most stimulating ways of sheltering 3,000 people from the elements—the hyperbolic parabola, the space frame, the shell dome—but the object has been to give formal expression to a liturgical statement of belief in God rather than the ingenuity of man."

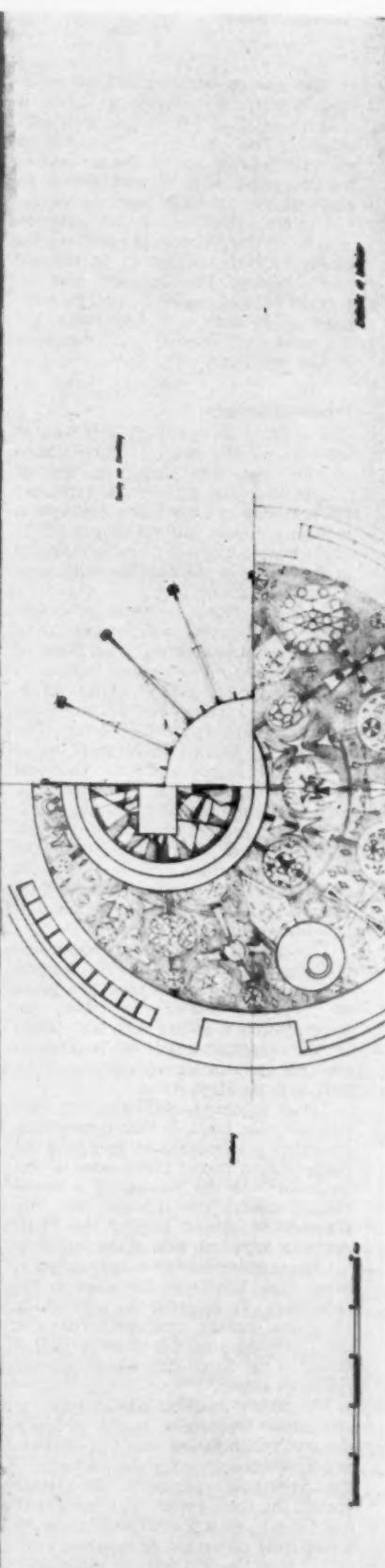
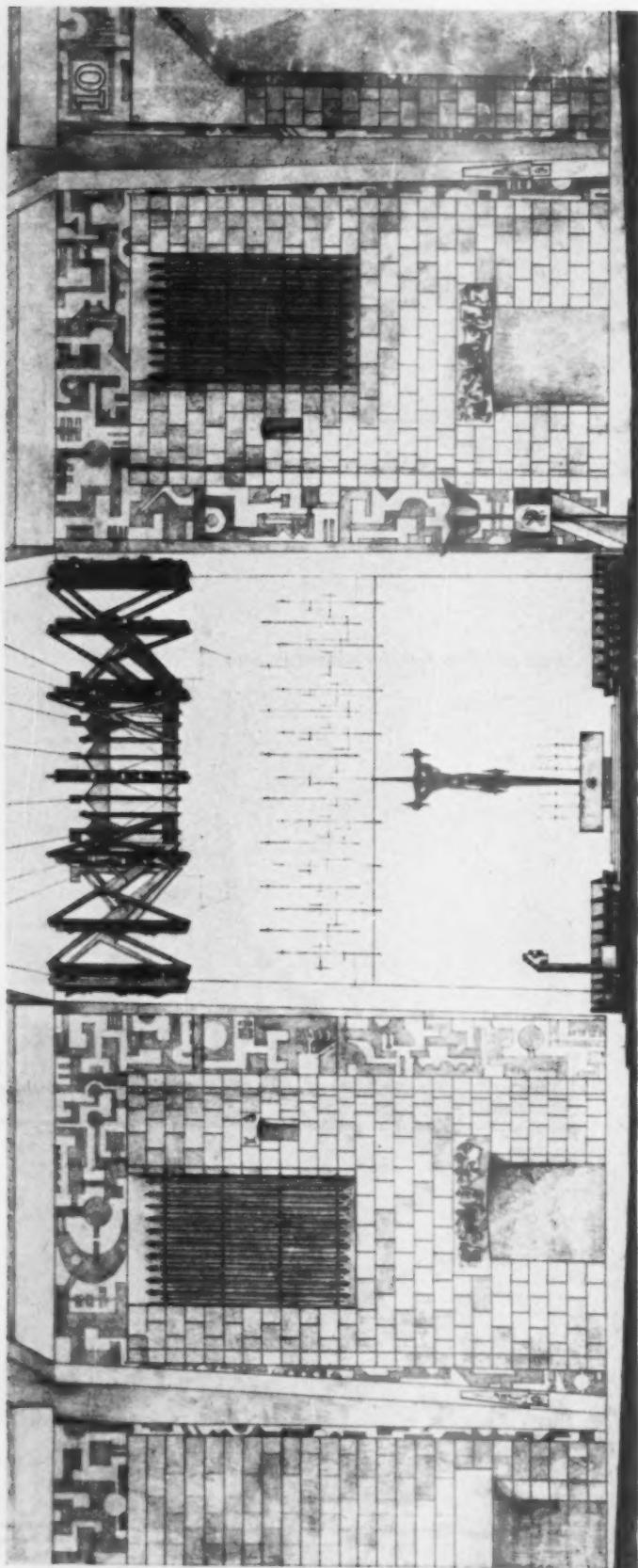


Cross section

West elevation and longitudinal section



First premiated design

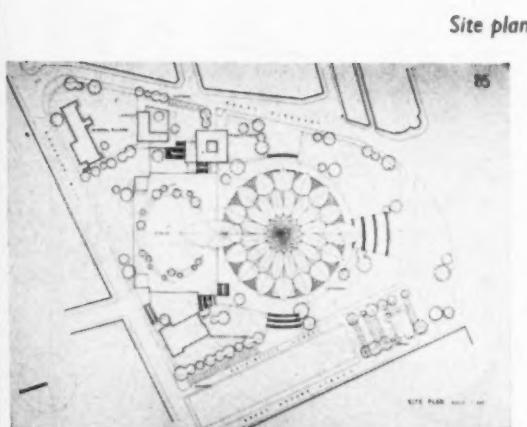


A detail of the interior. It has been one of the intentions in the design to provide a broad architectural framework within which the other arts can obtain their most significant expression

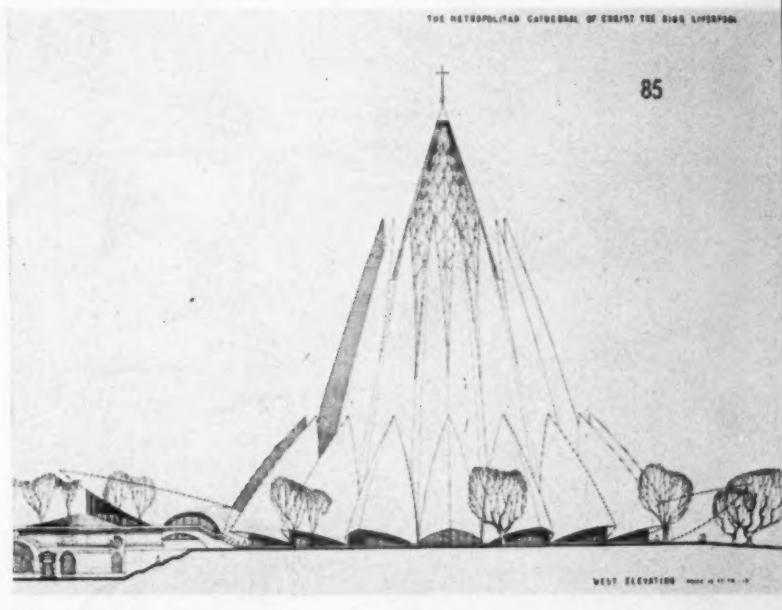
Second premiated design by C. H. R. Bailey (No. 85)

Assessors' Report continued

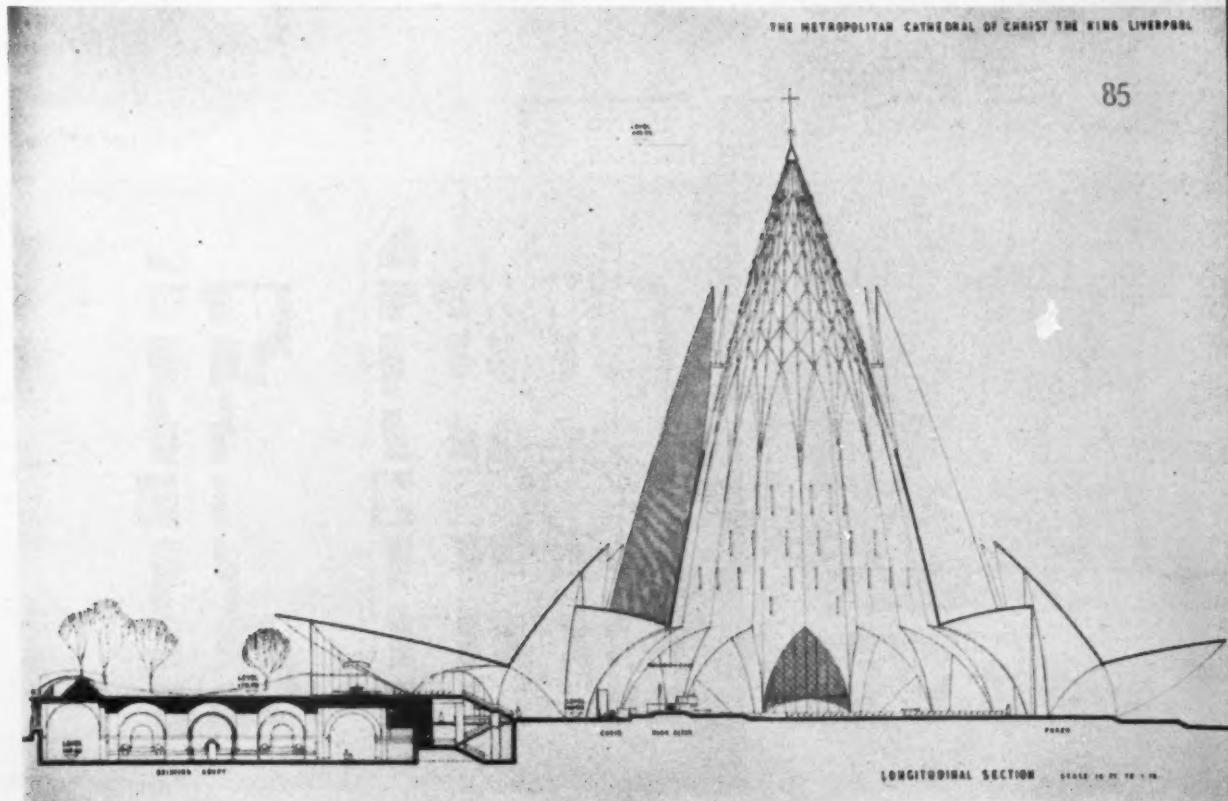
The second premiated design (No. 85) is architecturally one of the simplest submitted. It is uncomplicated and direct. The enclosed space of the great papal crown is impressive. Undoubtedly this would make a beautiful cathedral. The author has obviously been influenced by the Sydney Opera House.

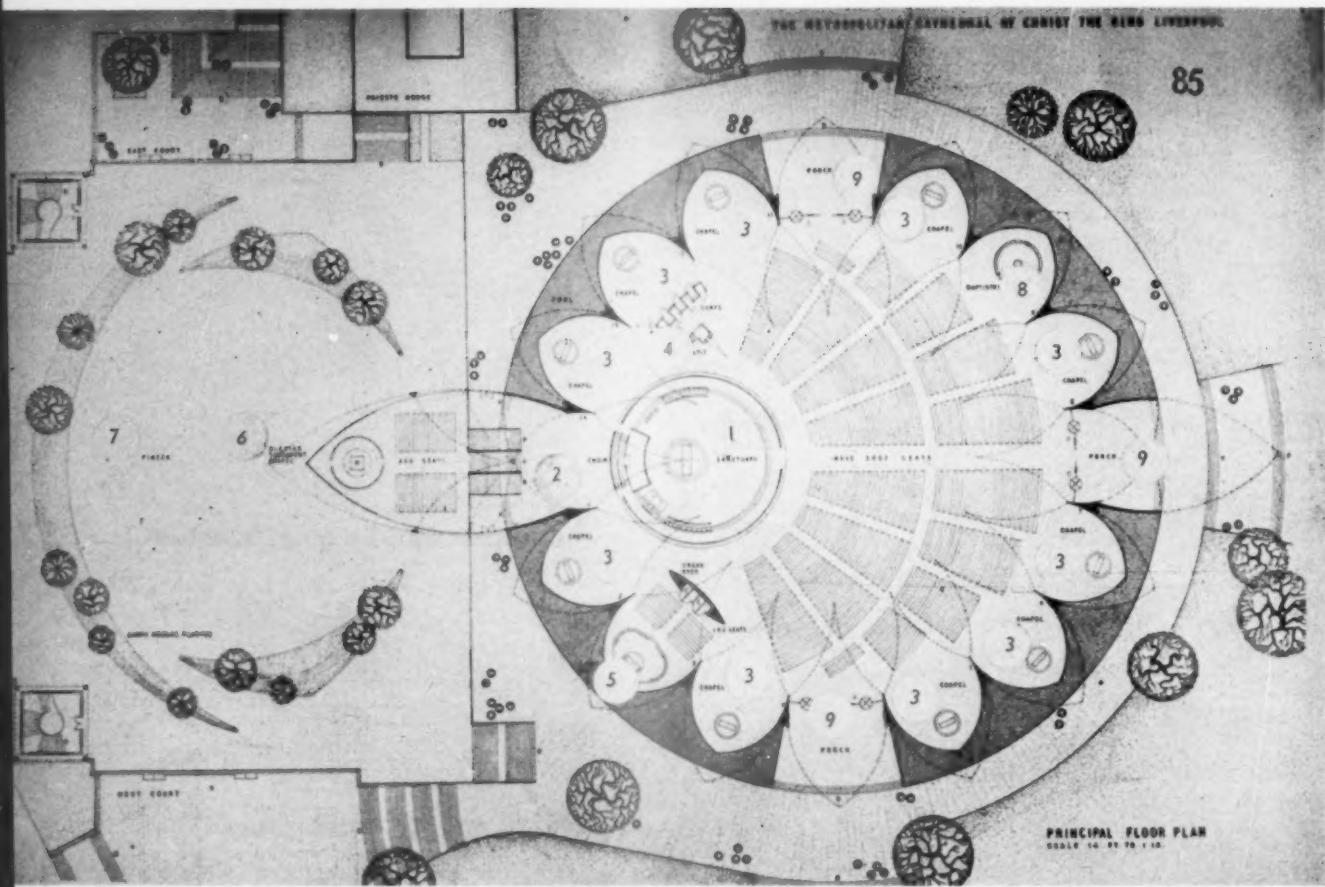


Longitudinal section

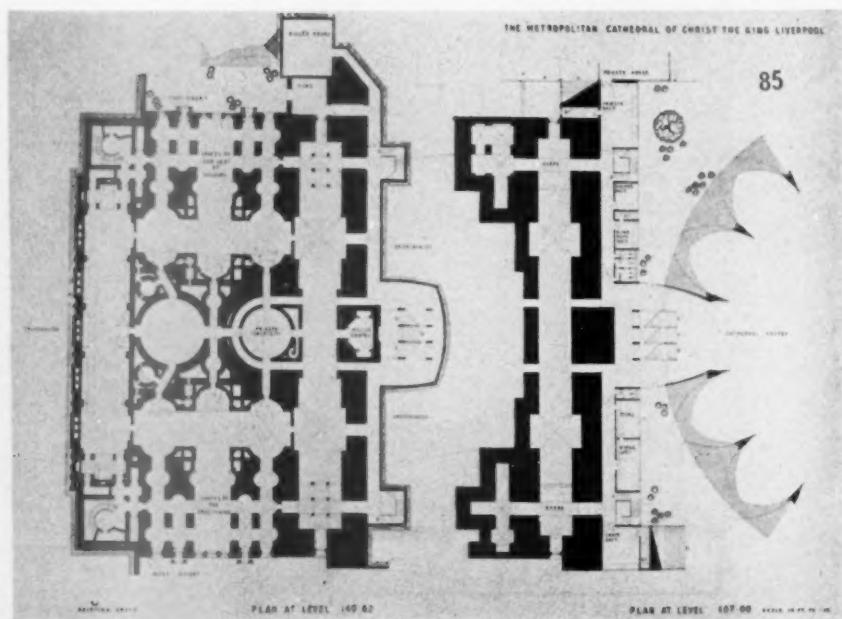
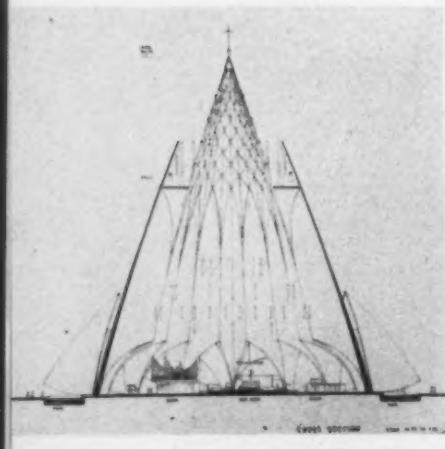


West elevation



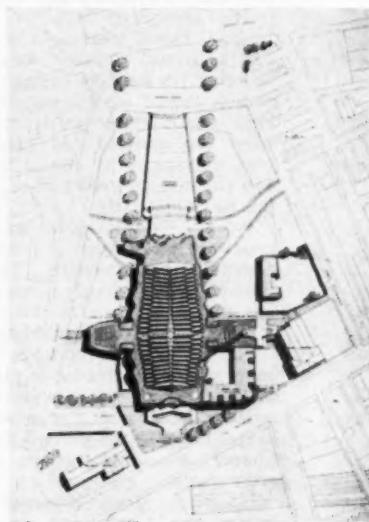
**Second premiated design**

**KEY:**  
1. Sanctuary. 2. Choir. 3. Chapel.  
4. Pulpit. 5. Lady Chapel. 6. Blessed  
Sacrament Chapel. 7. Piazza. 8.  
Bobtistry. 9. Porch.

**Principal floor plan****Crypt and lower floor plans**

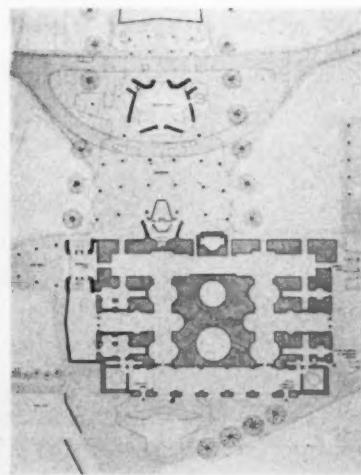
## Assessors' Report continued

*The third premiated design (No. 231) is imaginative and fresh. It contains many original features which deeply impressed the judges. But it was thought that the resultant building would not be sufficiently imposing for a Metropolitan Cathedral. The elements of the design are conceived with great skill to terminate in the High Altar. There is a stained glass cross above a folded roof. While the judges were convinced that a folded roof of concrete covered by copper could be designed on the general lines suggested by the author, it was felt that much more detailed study would be necessary before building. It was thought, however, that the position of the Blessed Sacrament Chapel was unfortunate. Not only is it very distant from the sacristies but architecturally its site is less significant than that of the Lady Chapel marked by the tower.*

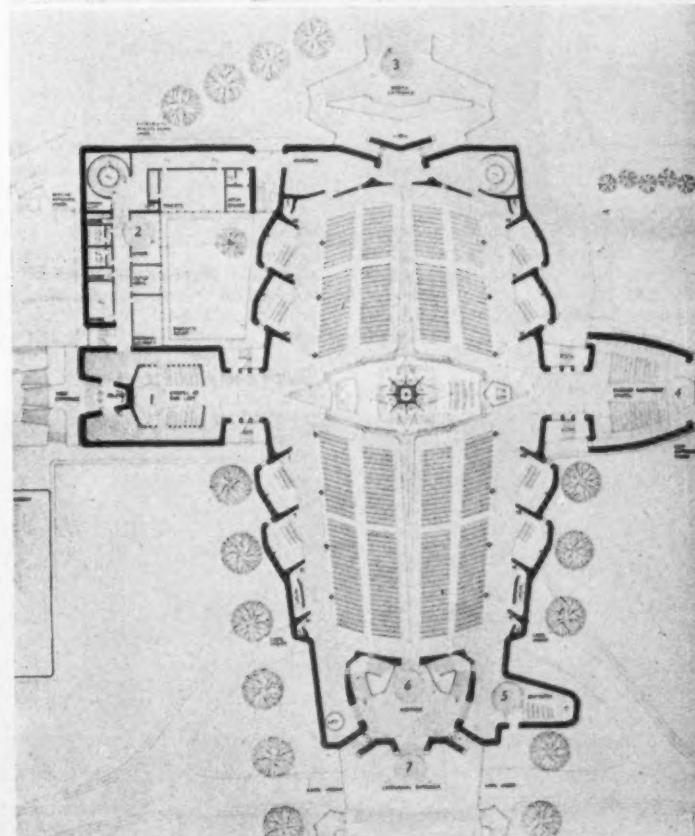
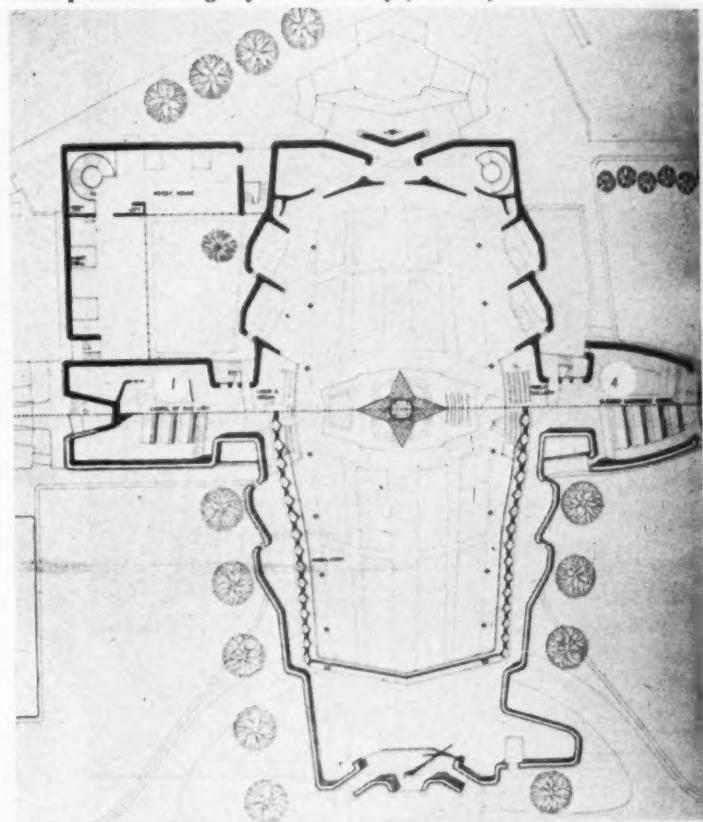


Site plan

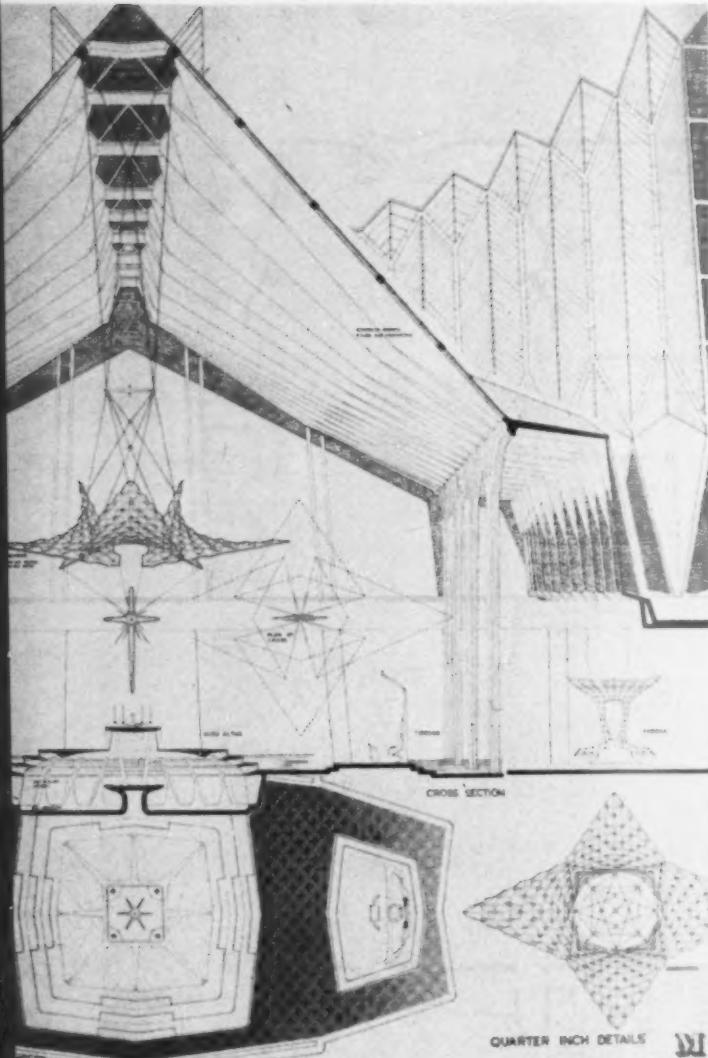
Lower floor plan



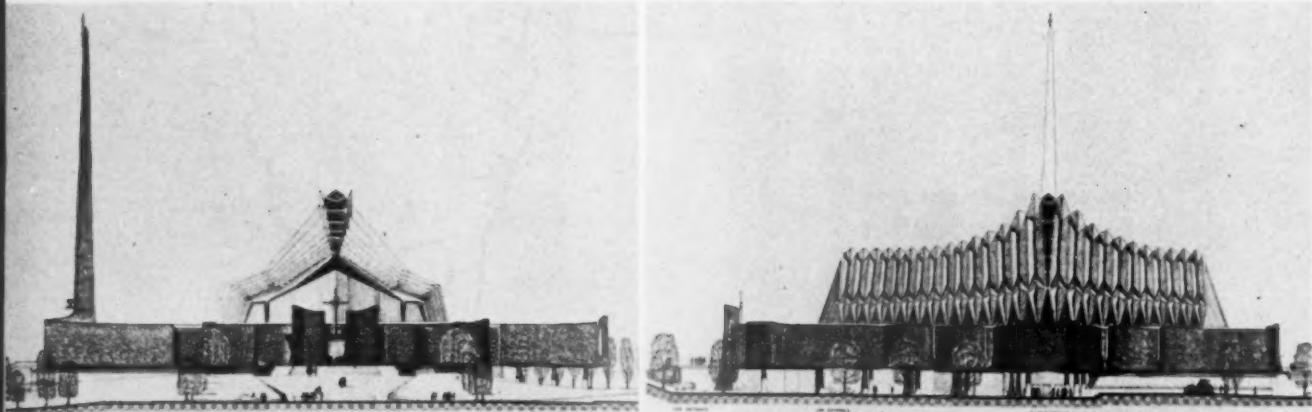
## Third premiated design by Arthur Bailey (No. 231)



## Third premiated design



South and east elevations



**Assessors' Report continued**  
**Highly commended designs:**

No. 15 (Clive Entwistle) is one of the most competent submitted in this competition and has structural qualities of great distinction. The plan is thoroughly worked out but the judges considered that maintenance would create a problem in Liverpool. They also felt that the whole conception of this building made it more suitable to the Far East than to a Northern English industrial city.

The authors of No. 186 (John H. Jakob and Anthony C. Adcock) have achieved an impressive simplicity of design. Their whole conception made a strong appeal to the judges but, on plan, the grouping seemed untidy. The concept of a single room flooded with golden light was appreciated but the divorce of the main space from all the chapels was thought to spoil an otherwise splendid plan. The design is sincere and suggests the influence of the church at Baranzate, near Milan.

The author of No. 197 (Michael Jerome) shows great sincerity and his details are full of charm. In character, however, his building suggests a parish church rather than a cathedral. The High Altar, moreover, is too remote from the congregation. The judges were impressed by the skilful detail and sensitive appreciation of scale and the use of materials.

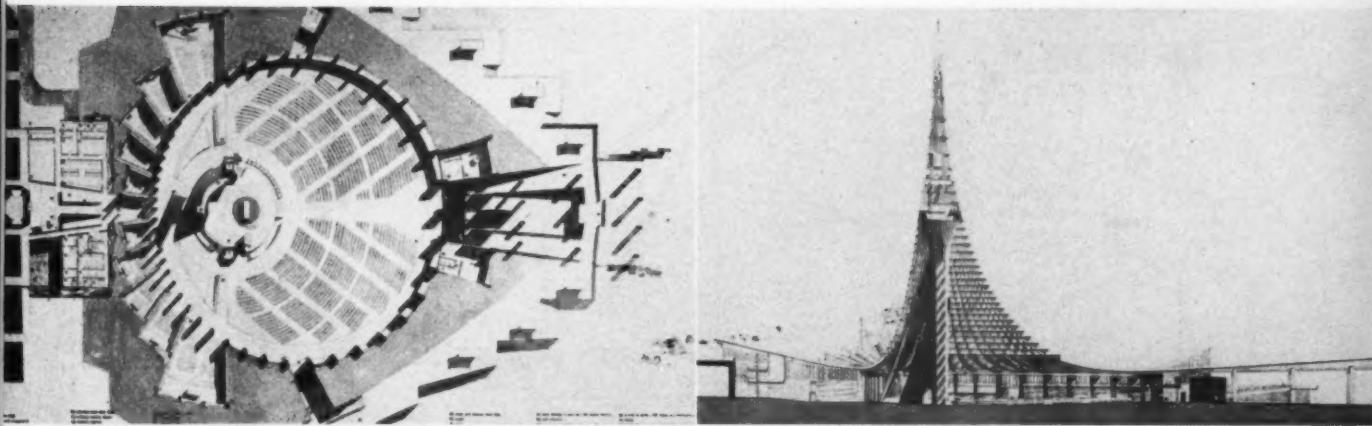
No. 254 (Norah Glover in collaboration with Z. Borys) is a compelling design of great strength. The judges found the plan deeply interesting but felt that the sweep of the roof destroyed the scale of the building.

No. 285 (Raglan Squire & Partners) bears some resemblance in plan to the winning design but, despite its many qualities, fails by comparison. The judges felt that the Blessed Sacrament Chapel was not given sufficient prominence.

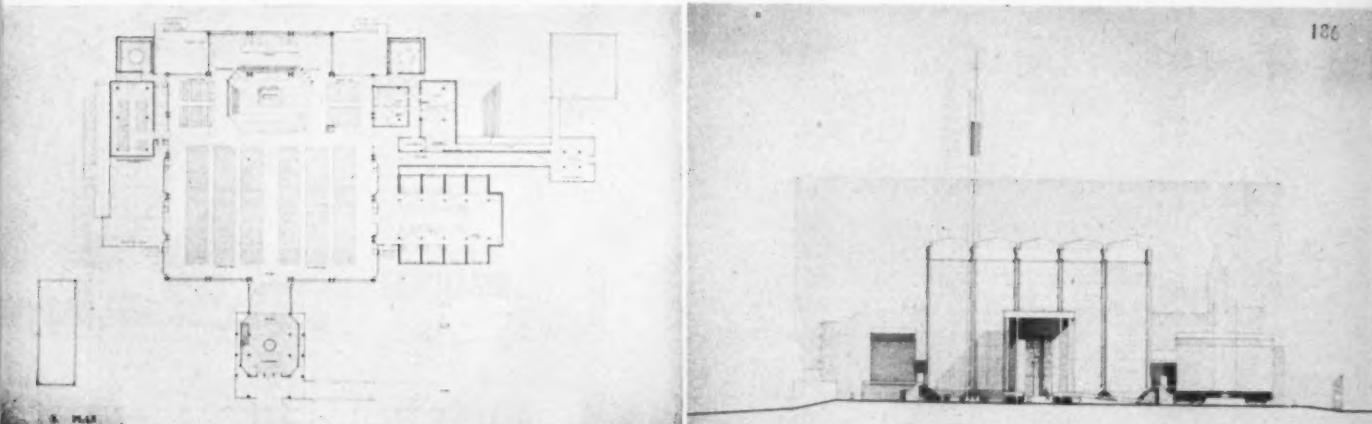
No. 291 (Tom Hancock) is an interesting design and shows the author's architectural competence, but the judges felt that the concept lacked grandeur and spiritual quality.

## highly commended designs

Design by Clive Entwistle (No. 15)



Design by John H. Jakob and Anthony C. Adcock (No. 186)



**Commended Designs:**

The author of No. 34 (Andrew Jackson) is commended for a plan which is simple, clear and workable. The judges thought, however, that as a grand design it fell short of cathedral stature.

Although No. 53 (Peter Dickinson & Associates) somehow managed to achieve only a commonplace appear-

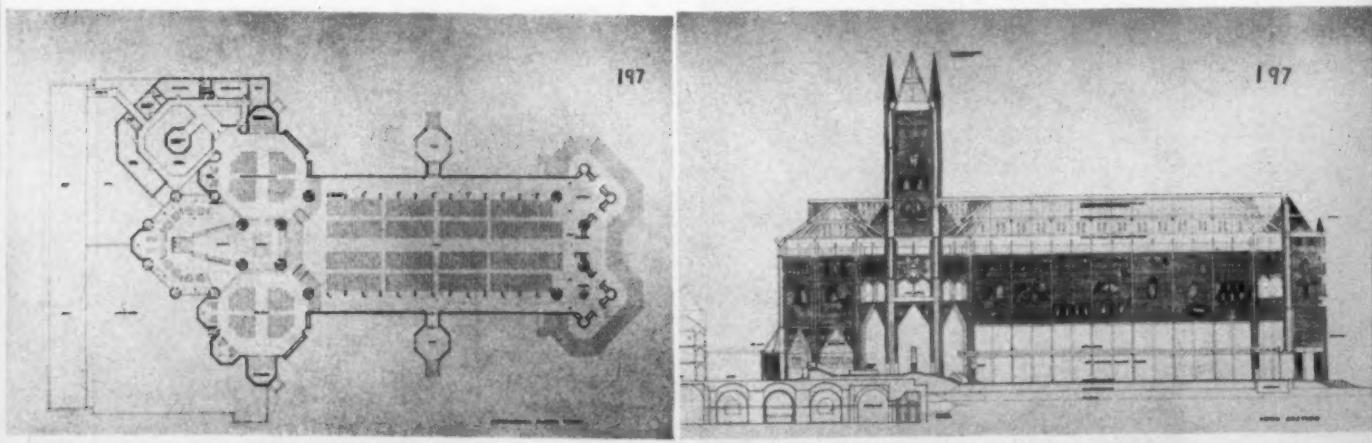
ance the judges felt that the many fundamental qualities of the plan deserved notice. The authors have splendid ideas and have succeeded in revealing them in their skilful drawings.

No. 96 (John Ashworth) has been selected for special mention because of its practical plan. Undoubtedly the author has solved the liturgical prob-

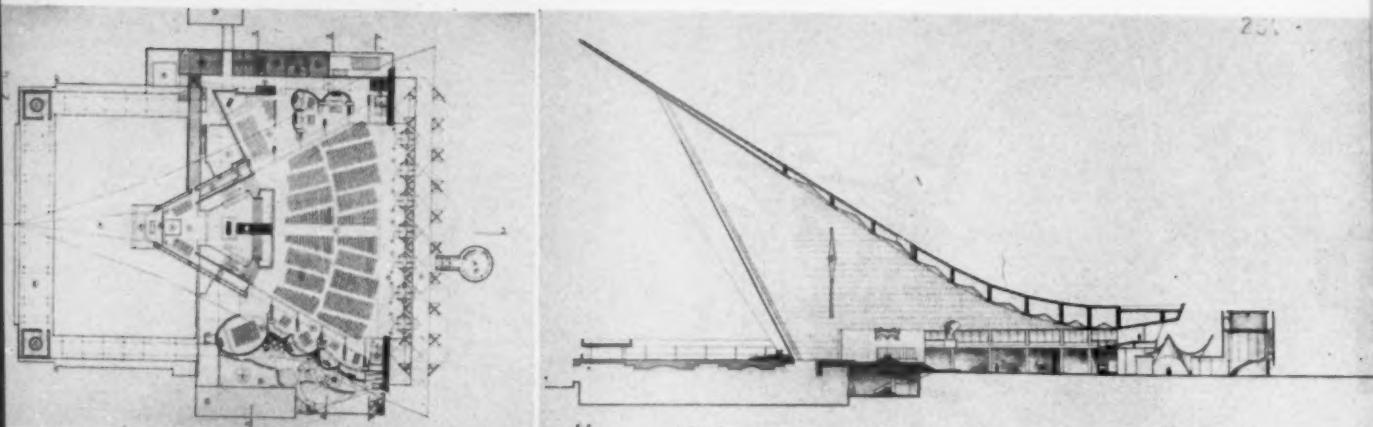
lems. The judges felt, nevertheless, that it was over-elaborate and suffered from unfortunate proportions.

No. 100 (Patrick J. Quinn) is a plastic conception with a clever use of intricate lighting but the character of this building was judged unsuitable for Liverpool. It was also felt that the High Altar is too far removed from the people.

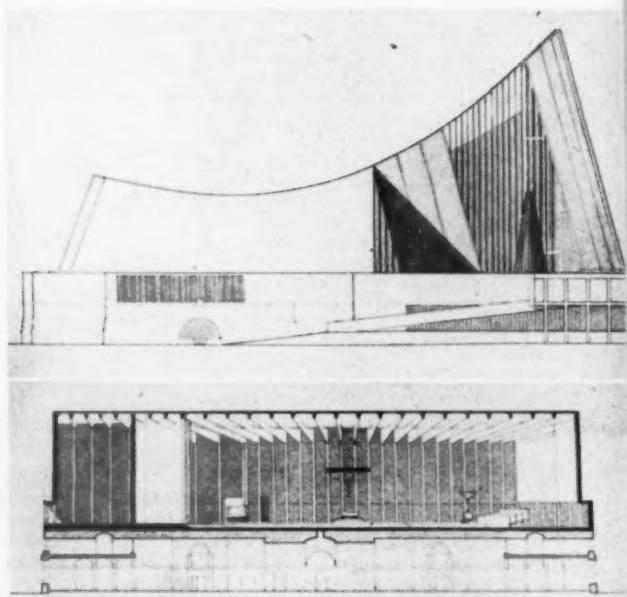
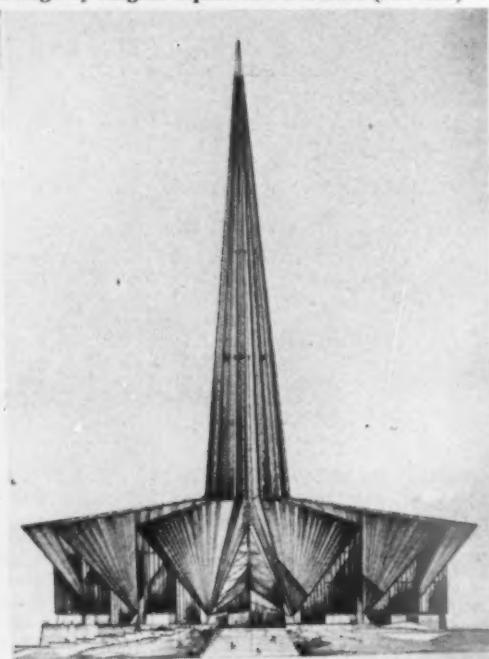
Design by Michael Jerome (No. 197)



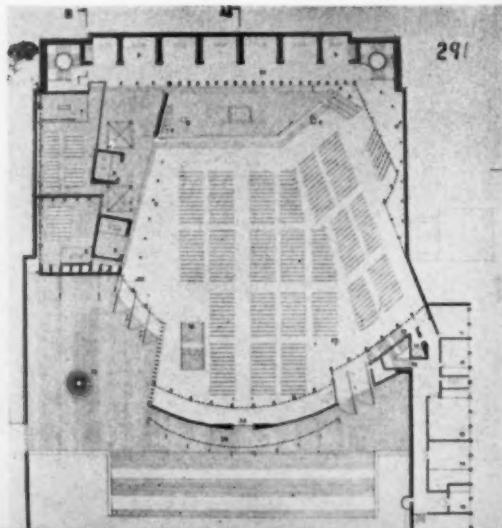
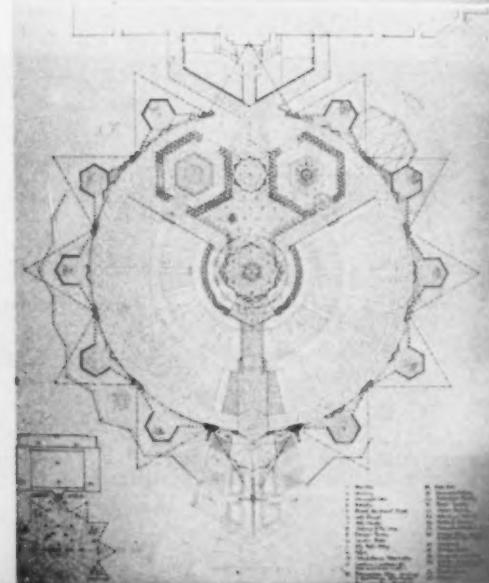
Design by Norah Glover in collaboration with Z. Borys (No. 254)



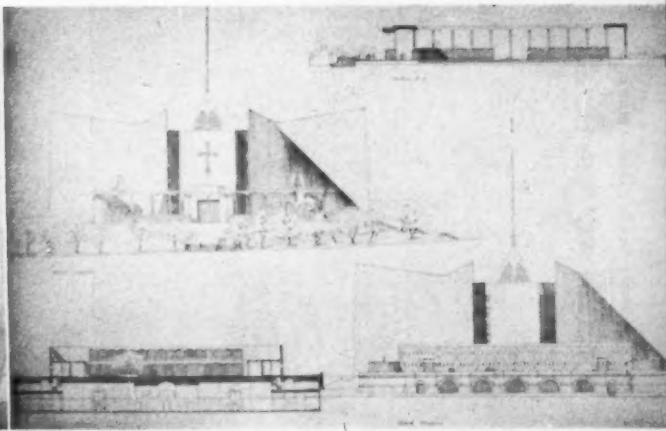
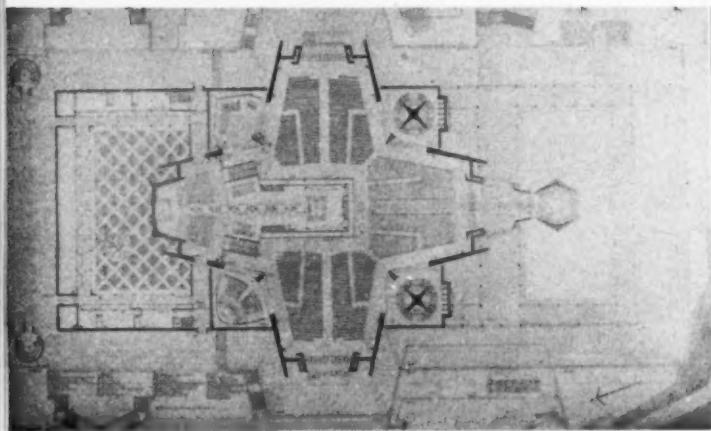
Design by Raglan Squire and Partners (No. 235)



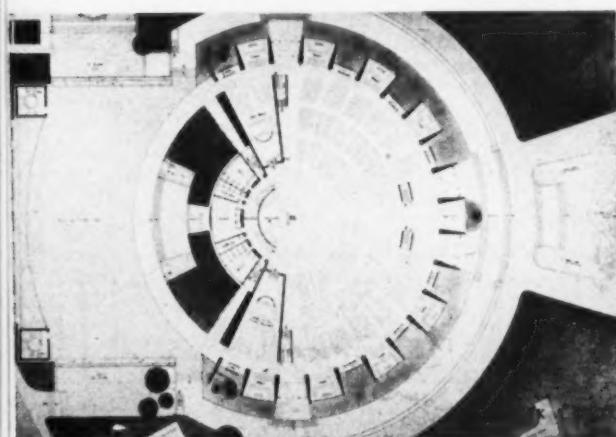
Design by Tom Hancock (No. 291)



Design by Andrew Jackson (No. 34)



Design by Peter Dickinson and Associates (No. 53)



#### Assessors' Report continued

No. 131 (Michael N. Clinton) is a design of great delicacy and charm but it was felt to lack strength and would not have produced an imposing cathedral.

No. 149 (George P. Buzuk) one of the many strung roof designs, was

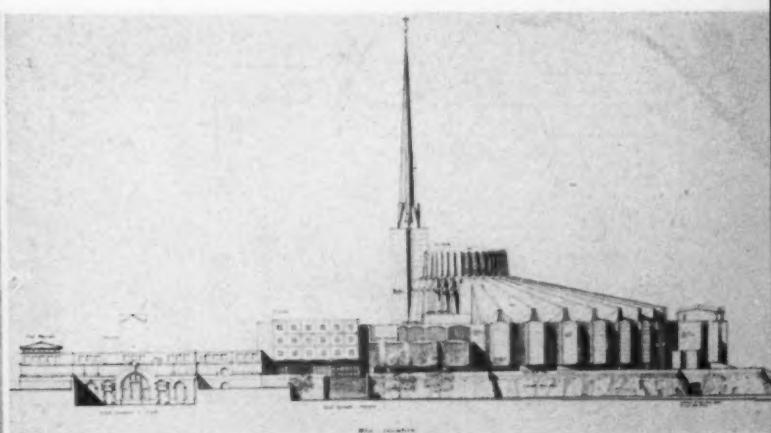
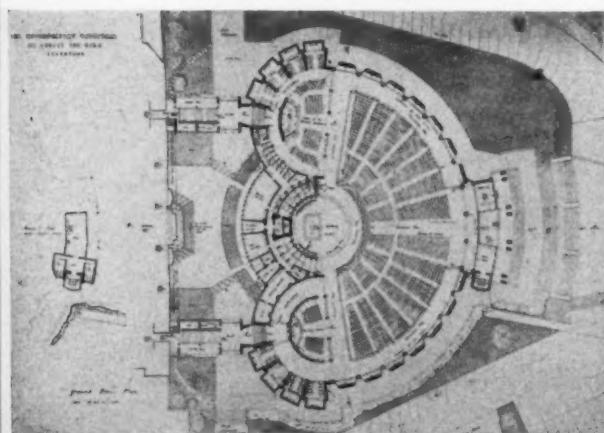
among the very best. The drawings were rather too sketchy and this may be one of the reasons why the judges found the scale unhappy.

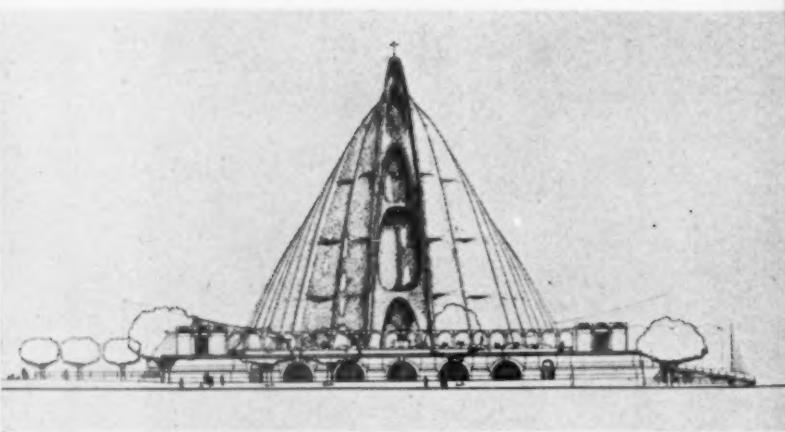
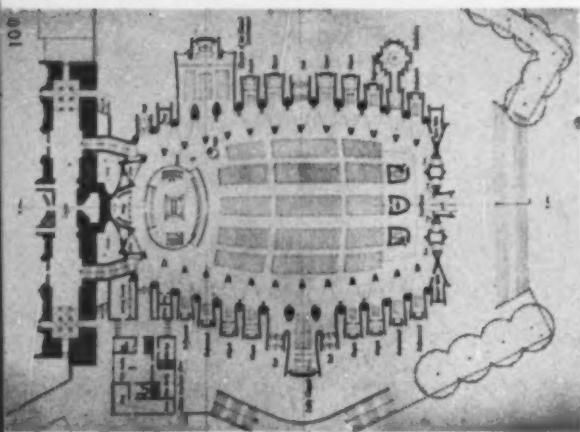
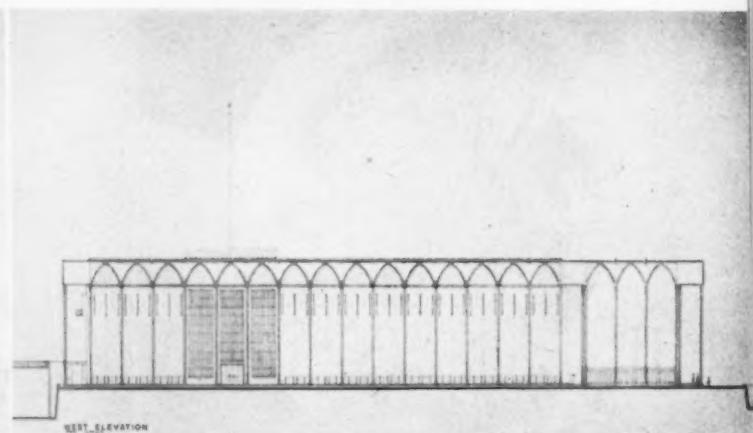
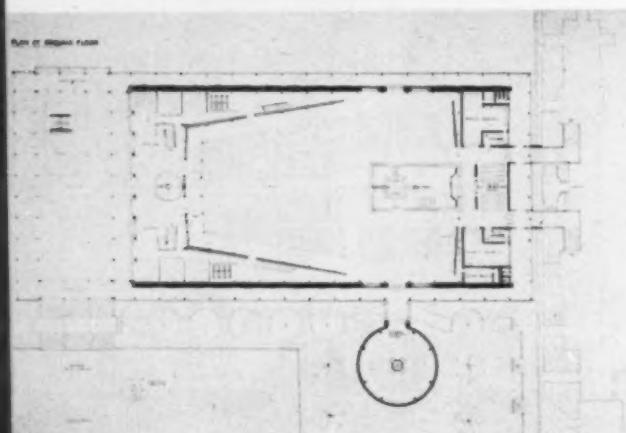
No. 188 (J. R. Gradige, Peter Jameson & Associates) on plan provided a unique solution to the problems set to competitors. While applauding much of the detail the judges, nevertheless, found many faults in the general

conception.

Although the judges were quite clear that No. 203 (Gerald Howes and Peter Eiseman) failed as a cathedral building they felt that the authors should be commended for an impressive design. This design seemed to lack specifically religious quality but it would have succeeded as a structure for general cultural purposes.

Design by John Ashworth (No. 96)



**Design by Patrick J. Quinn (No. 100)****Design by Michael N. Clinton (No. 131)****Assessors' Report continued**

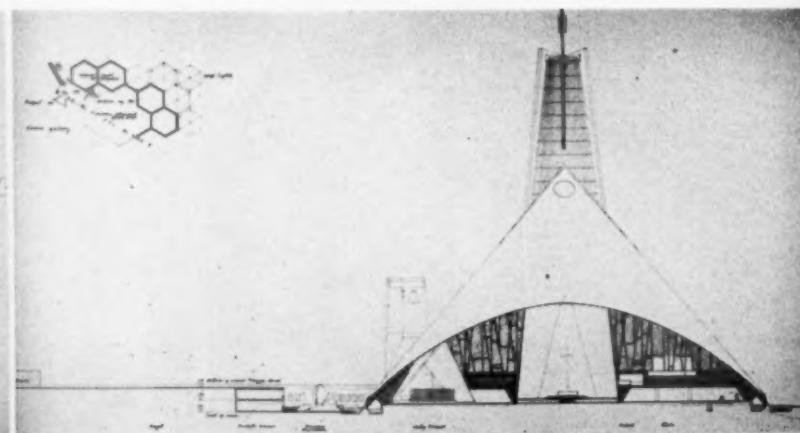
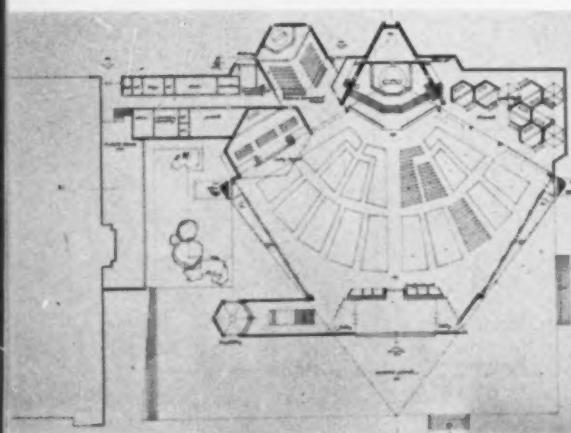
No. 230 (Guy Morgan & Partners) showed a plan of marked competence but while deserving credit for their scheme the authors have not succeeded in producing an inspiring cathedral.

Architecturally No. 236 (Lewis S. Ash) was one of the most interesting

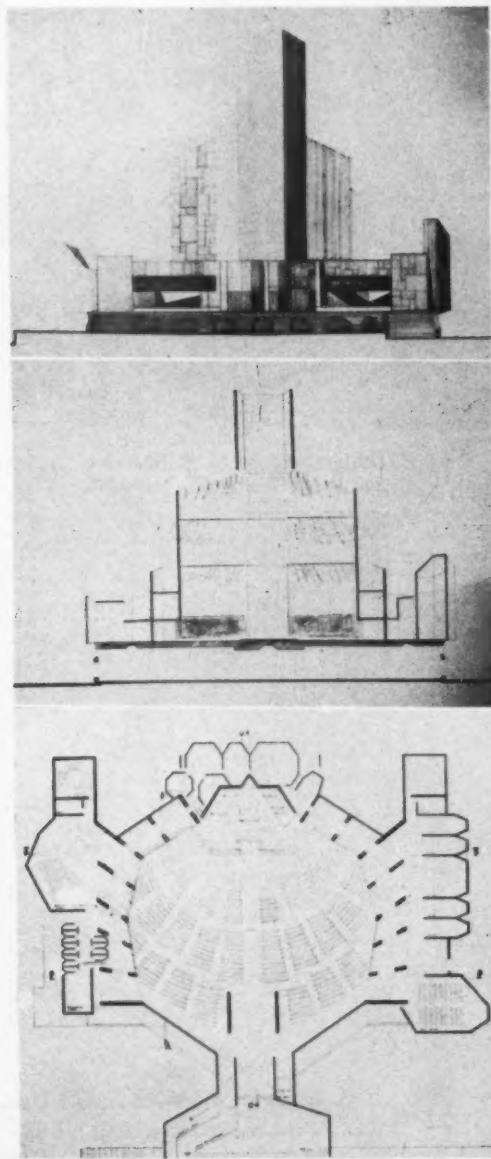
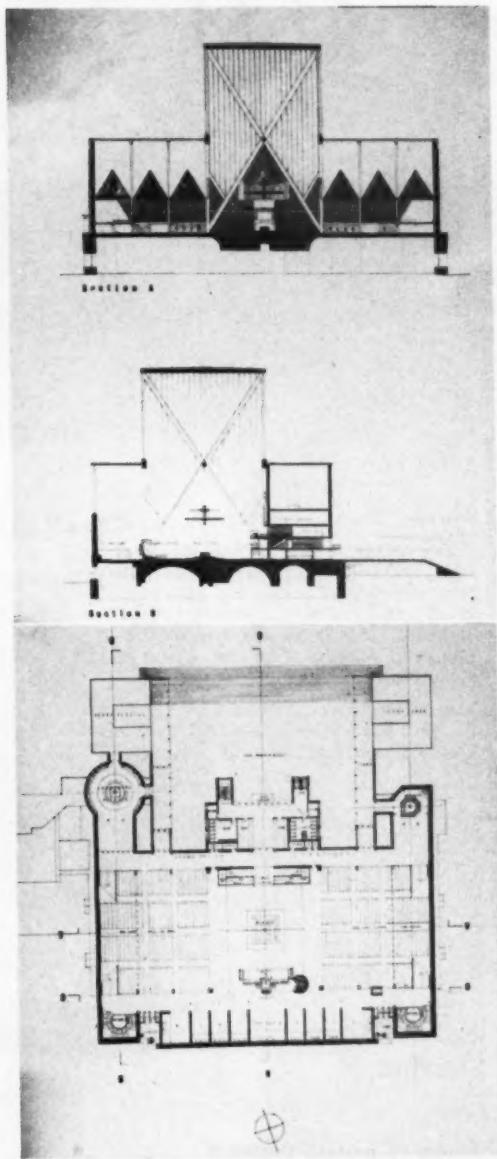
of plans submitted. The whole concept is refreshing and exciting. But while the site of the Blessed Sacrament Chapel is bold and original the judges did not think that the experiment had succeeded. They also felt that large areas of clear glass are unsuitable to the atmosphere of Liverpool. Special credit was given for the landscaping which is markedly sensitive.

The structure of No. 259 (John G. R. Sheridan and Bruno Fedrigolli) was thought to be unnecessarily complex but deserves mention for its undoubtedly beauty. The problem facing the authors of this design has been solved much more directly and simply by the author of the winning design.

No. 293 (Edward Harry of Wells, Hickman and Partners) is a competent

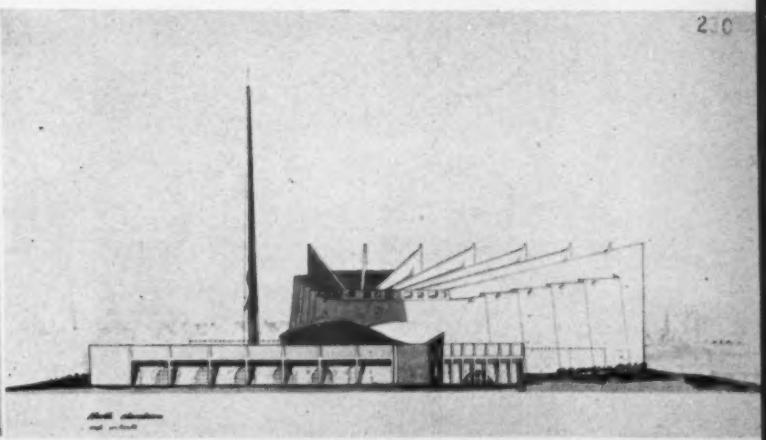
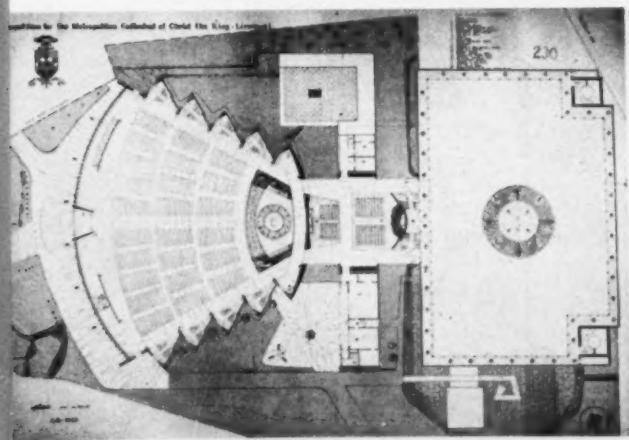
**Design by George P. Buzuk (No. 149)**

▼ Design by J. Gradige, P. Jameson and Associates (No. 188)



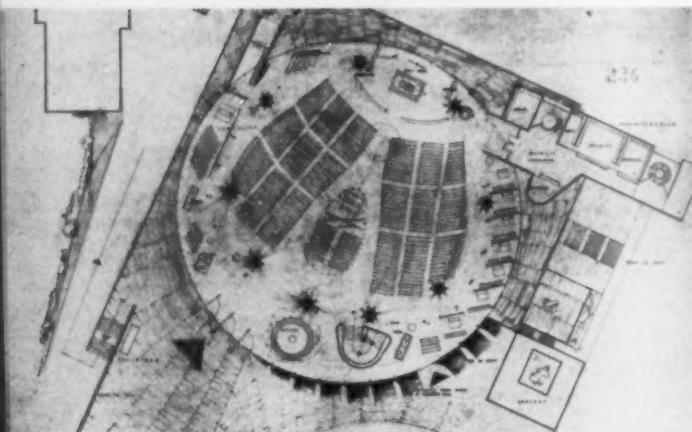
▲ Design by G. Howes and P. Eiseman (No. 203)

▼ Design by Guy Morgan and Partners (No. 230)

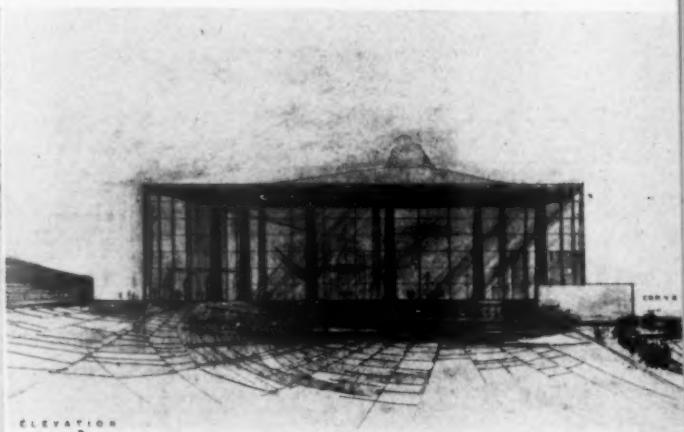
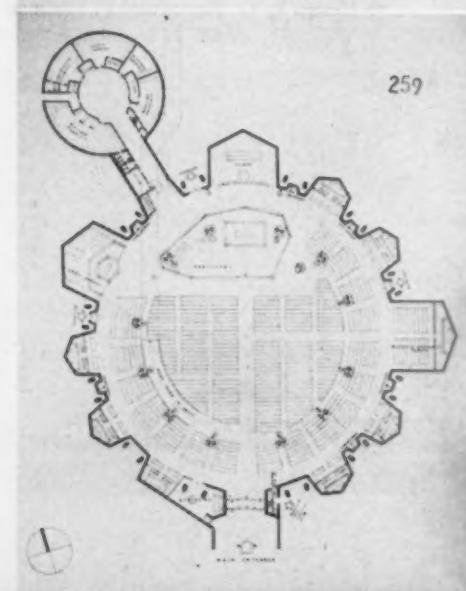
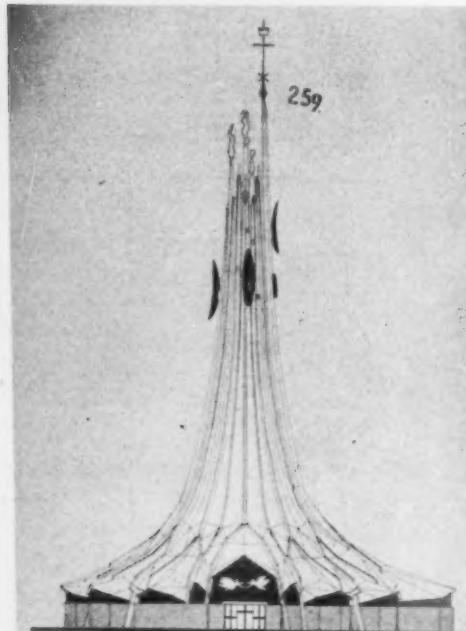


# cathedral

Design by Lewis S. Ash (No. 236)



Design by John G. R. Sheridan  
and Bruno Fedrigolli (No. 259)



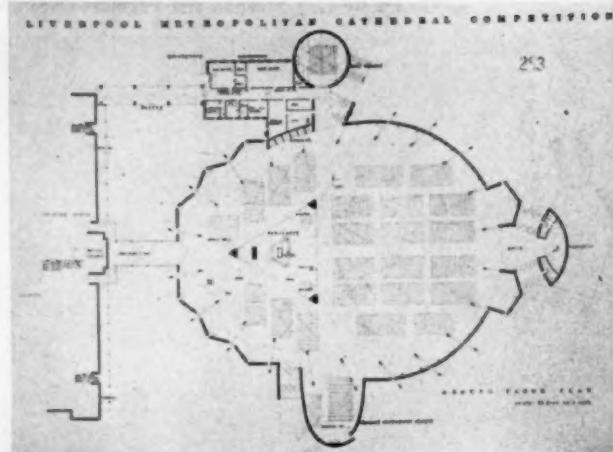
**Assessors' Report concluded**

design of great interest but the total effect lacked grandeur. The judges felt that sufficient thought had not been given to the functional purposes of the cathedral. It was thought that the congregation would not be well served in a cathedral on this plan.

**The Most Reverend John C. Heenan  
Sir Basil Spence, A.R.A., F.R.I.B.A.  
David Stokes, Esq., F.R.I.B.A.**



Design by Edward Harry of  
Wells, Hickman and Partners (No. 293)



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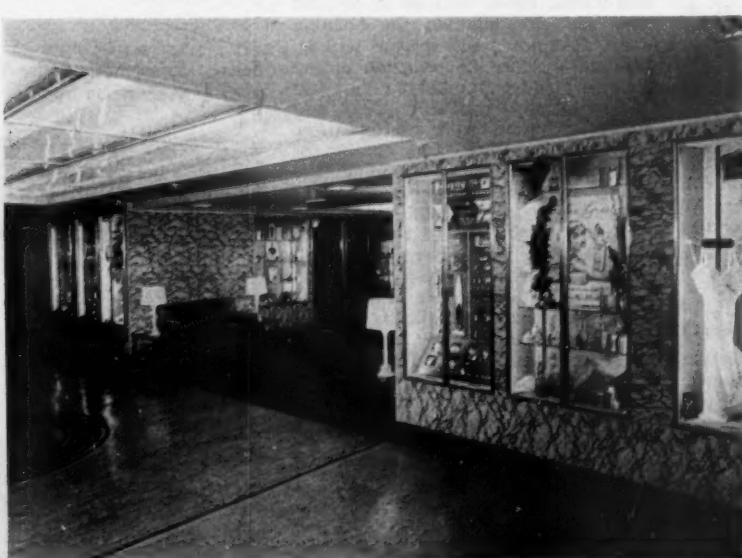
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rainwater and soil goods division of **ALLIED IRONFOUNDERS**



- Magnet Joinery Ltd. show a group net profit for the year ended February 29, 1960, of £141,159, compared with the previous year's result of £73,225. A dividend of 30 per cent, less tax, has been recommended. It has been proposed that the share capital of the company should be increased from £350,000 to £490,000 by the creation of 2,800,000 additional ordinary shares of 1s each. These shares are to be offered at 2s each to ordinary stockholders in the proportion of one share for every two units of ordinary stock held.
- Mr. E. F. Choppen has resigned from the board of Esso Petroleum Co. Ltd. following his appointment as deputy Coordinator of the world-wide marketing operations of Standard Oil Co. (New Jersey).
- Robt. Ingham Clark & Co. have taken over and will develop the activities in the field of industrial and marine paints previously pursued by Scottish Paints, Renfrew and Belfast. R. Gay & Co. (Scotland) has been formed to supply paint products for the decorative and maintenance trades, manufactured at their Renfrew works. The former interests of Scottish Paints have now been incorporated into these two companies.
- The General Electric Co. Ltd. show a group profit, after taxation, for the year ended March 31, 1960, of £2,532,384, compared with the previous year's result of £2,123,848. A final ordinary dividend of 7 per cent has been proposed, making a total distribution of 10 per cent for the year.
- James Scott & Co. (Electrical Engineers) Ltd. show a trading profit for the year ended January 31, 1960, of £226,416, compared with last year's figure of £225,480. A final ordinary dividend of 20 per cent is to be paid, making a total distribution of 25 per cent for the year.
- The Incandescent Heat Co. Ltd. show a net profit for 1959 of £110,149. A dividend of 12½ per cent is to be paid.
- Mr. Charles Dodd has been appointed press officer to the Cementation Group of Companies.
- A National conference on Modern Trends in the Manipulation of Metals has been organized by the Institution of Production Engineers. It will be held at Brighton from October 12 to 14, 1960. Full details can be obtained from the secretary of the Institution at 10 Chesterfield Street, London, W.1.
- The telephone number of the Chessington Depot of British Insulated Callender's Cables Ltd. has been changed to Lower Hook 3366/7/8.
- Following the amalgamation of the Lewis Berger and Jenson & Nicholson groups of companies they will in future be known as Berger, Jenson & Nicholson Ltd.
- The net profits of Hoover Ltd. for the six month period to June 30 this year are £1,960,000 compared with £2,553,000 achieved during the equivalent period last year.
- The British Anzani Engineering Co. Ltd. has extended its financial period from the end of February to August 31, 1960, and all future financial years will end on August 31. An interim dividend of 5 per cent is to be paid.
- The Cork Manufacturing Company show a group net profit for the year ended April 30, 1960, of £54,725, compared with the previous year's result of £25,173. A dividend of 13½ per cent is to be paid.
- Denny Mott and Dickson Ltd. show a group profit before taxation for the year ended March 31, 1960, of £409,818, compared with the previous year's result of £237,312. An ordinary dividend of 12½ per cent is to be paid.
- H. Fairweather and Co. Ltd. have been awarded the contract for the extension of Threshold House, Shepherds Bush, London.
- Mr. P. E. Cotton has resigned from the position of director of Burgess Products Co. Ltd.
- Warsop Power Tools Ltd. have completed negotiations for the purchase of all issued share capital of Vibrated Concrete Construction Company.
- Following the acquisition of Bertram Thomas (Engineers) by the Hackbridge & Hewitt Electric Co. Ltd., the board of directors of Bertram Thomas will be as follows:—Mr. Anthony M. Browne (chairman), Mr. A. S. Thomas (managing director), Mr. J. L. Rowbotham, Mr. Aloysius M. Browne and Mr. H. G. Moore.
- Mr. J. F. Stanners, B.Sc., has succeeded Dr. J. C. Hudson as head of corrosion research in the chemistry department of the British Iron and Steel Research Association. Mr. E. E. White has been appointed head of the Association's corrosion advice bureau.
- Fred Whiteley Ltd., sheet metal workers of Halifax, have taken over control of Office & Factory Equipment (Leeds) Ltd. The name of the latter company, who are the manufacturers of Uni-Graph wall charts, has been changed to Steel Fabrications (Halifax) Ltd. of 19 Carlton Street, Halifax.
- Quickset Water Sealers Ltd. have appointed Mr. A. W. Brownscombe as their North London representative.
- Dussek Bros. & Co. Ltd. have declared an interim dividend of 5 per cent, less tax, on their ordinary shares.
- Stanley Works (G.B.) Ltd. have appointed Mr. Eric Newbigging, B.Sc. (Econ.), as sales promotion manager.
- Bakelite Ltd., makers of Warerite wallboard, have become associate members of the Fibre Building Board Development Organisation Ltd. under the scheme whereby U.K. firms who process board without being board manufacturers are eligible for membership.
- The Rt. Hon. The Viscount Head of Thrope, P.C., C.B.E., M.C., has resigned from the board of A.E.I. Ltd. as a result of his appointment as High Commissioner of Nigeria.



*In this feature are reviewed new lines introduced to the building industry for the first time and additions or improvements to existing ones. Any advantages claimed for a product are from information supplied by the manufacturer*

#### Chandelier (A)

This is one of a pair of chandeliers designed by Siemens Ediswan Lamps and Lighting Department, A.E.I. Radio and Electronic Components Division and supplied with a number of wall lighting fittings for the new Royal Iranian Embassy at Karachi. The chandeliers are mainly made from brass tube, satin-finished and lacquer-protected. The main motif of design is the bullrush. It is seen in brass tube and ebonized wood between each lamp and is repeated in brass around the satin white-finished glassware. A futuristic ceiling rose decoration and a Venetian red tassel hanging from the centre of the chandelier completes the design.

*Associated Electrical Industries Ltd., 155 Charing Cross Road, London, W.C.2. Gerrard 8660.*

*Readers' Information Service, Ref. A. Date 31/8/60.*

★

#### Solid Fuel Boiler (B)

The Sofonomic Boiler No. 1 is rated at 12,000 B.Th.U./hr. It is designed to provide domestic hot water service through a 25 to 30gal storage cylinder, and additional service of a towel rail or radiator of up to 10 sq ft surface area. It has a circular cast iron waterway, a built-in hopper and large lift-off refuelling lid. The boiler is also fitted with an easily adjusted thermostat for automatic control. The cast iron bottom grate has a rotary movement for de-ashing and can be dropped into the ashpan for dumping. There are shaking and dumping controls which can be reached through the hinged outer door. Finish: stove enamelled white, cream and blue with black vitreous enamelled hob and black lower front panel. Overall dimensions: 22½in high by 15in wide by 15¾in deep. Price: £25 19s 9d.

*Sofono Division, Grange-Camelon Iron Co. Ltd., Falkirk, Scotland.*

*Readers' Information Service, Ref. B. Date 31/8/60.*

★

#### Forced-convection Cabinet Radiators (C)

The Slimline is a forced-convection cabinet radiator designed for domestic use. It can be used on the same hot-water system in conjunction with ordinary radiators. In principle, the Slimline radiator diffuses warm air downwards across the floor where it mingles with the room temperature to provide an all over warmth. The appliance has both front and rear out-

lets making it capable of heating two rooms simultaneously when mounted on a dividing wall. The Slimline is thermostatically controlled and its fan may also be used to circulate cool air in summer. It fits flush to the wall and requires less pipework than ordinary radiators. The cabinet is removable and the appliance is mounted on a backplate which is fixed to the wall and piped up to the central heating system and connected to the electrical supply. The Slimline embodies a copper-finned tube-type heat exchanger and a silent running slow-speed centrifugal fan. It has an output of 15,000 B.Th.U./hr. It is suitable for use on indirect water systems only. Finish: stove enamelled surround with hardwood and melamine wood veneer fascia; Surround—old gold, cream or silver grey; Fascia—mahogany, walnut or light oak. Price: £52 7s 6d. In addition the company is producing the Executive radiator which works on the same principle and is designed for use in hotels, offices, schools and other public buildings.

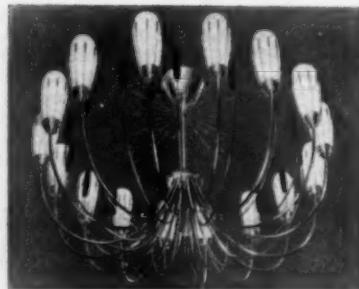
*Diffusion Radiator Co., 10a, Langley Road, Staines, Middx. Staines 54621.*

*Readers' Information Service, Ref. C. Date 31/8/60.*

★

#### Tube Bending Machines

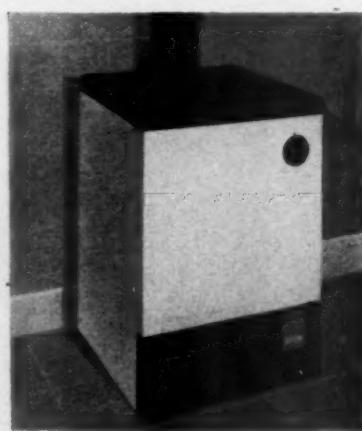
Additions have recently been made to the Herber hand-operated range of bending machines which were recently introduced from Sweden. These are production machines for cold bending thin-walled tubes without filling and they are also suitable for bending rolled sections with special tooling. Operation is on the principle of the internal mandrel and short radius and "S" bends can be produced quickly and simply without tube deformation, whilst the machines can be set for right-hand and left-hand bending. The heavier type machines have a combination of direct pull and gear reduction of 2 : 1 and they can be operated with both large and small tube diameters. Reduction gear operates over a moving slide and a plate with teeth which automatically readjust themselves when the pull-rod is applied. There is a lever for operating the mandrel and supporting pressure die. Tools consist of one centre forming die and two hardened locking jaws, one hardened internal mandrel, one hardened supporting pressure die and one stop. Each tube dimension requires special tools but for different radii only. The centre die is in certain cases interchangeable. Bending



*Top : Chandelier for Royal Iranian Embassy by A.E.I. Ltd. (A)*

*Centre : The Slimline forced-convection cabinet radiator (C)*

*Below : Sofonomic Boiler No. 1 by Grange-Camelon Iron Co. Ltd. (B)*





## a spray basin made in Vitreous China

The 'Standard' Handspray is designed to take full advantage of the economies of a single spray tap. Though intended mainly for schools, it is equally suitable for offices, shops, factories and cloakrooms in houses. The Handspray is symmetrical, compact and aesthetically pleasing. It is made in 'Standard' vitreous china. This material is hygienic because it is non-porous and it has the strength to resist rough treatment. For fine design in the most suitable material, specify 'Standard' vitreous china.

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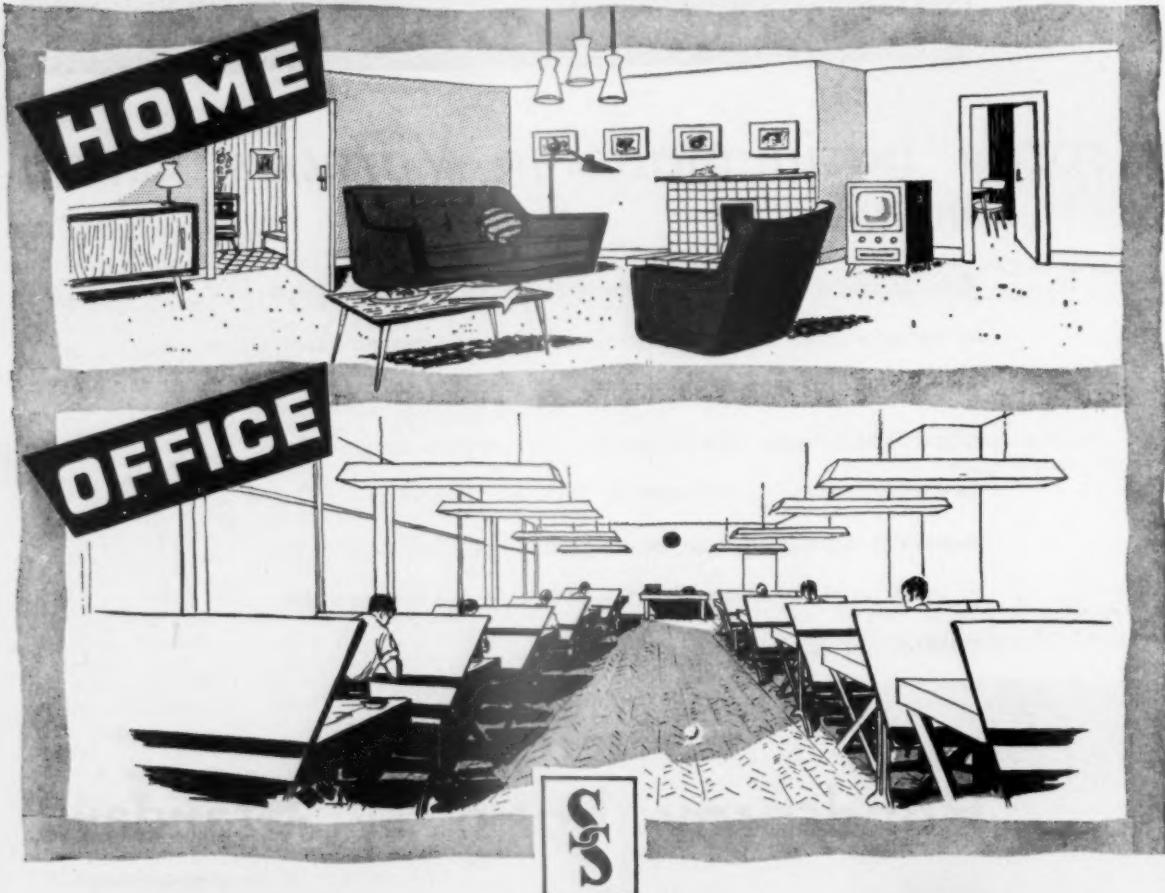
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# new products

*continued*

The Architect and Building News, 31 August 1960 283

capacity: thin-wall tube from  $\frac{1}{4}$ in dia to  $1\frac{1}{4}$ in dia. Minimum radius:  $3 \times D$  (reduced to a minimum of  $1\frac{1}{2} \times D$  if wall thickness is sufficient).

*Chamberlain Industries Ltd., Staffa Works, Argall Avenue, Leyton, London, E.10.*

*Readers' Information Service, Ref. D. Date 31/8/60.*

\*

### All-purpose Electric Cleaner (E)

The Electrux Model 64 suction cleaner is an all-purpose domestic unit. It has a vinyl-covered cylinder and is supplied complete with a full range of lightweight tools. These tools comprise two-way carpet nozzle, floor and wall brush, dusting brush, small nozzle and crevice nozzle. It is claimed that model 64 has deep penetrating suction power which removes dirt without harming piles or fabrics. It has a quiet running motor which is fully suppressed. Features include a cloth dust-bag which is easily accessible by unfastening two specially sprung cushioned end clips; supple hose covered in washable plastic braid; air-purifying pad to filter the exhausted air before it returns to the room; a spring loop to hang the cleaner ready for use; and double insulation. Finish: cylinder—sepia and ivory (two tone). Price: 19gn.

*Electrolux Ltd., 153/155 Regent Street, London, W.1.*

*Readers' Information Service, Ref. E. Date 31/8/60.*

\*

### Prefabricated Wooden Shelving (F)

Londonia prefabricated wood shelving is designed for speedy erection, adjustability and extension. The basic or initial bay consists of two uprights which are securely linked by three master shelves. Attachment is made by means of snap-in type locking connectors at the top, bottom and middle positions. These connectors are invisible when the shelves are in place. Top and bottom shelves are fitted with a 3in return, which acts as cornice and plinth respectively. The three master shelves are non-adjustable but the remaining shelves, normally four, are supported on special brass pegs and ferrules inserted into drillings in the uprights. Extension bays can be added by using one upright, shelves and a back, these readily fitting onto the end of the first bay. All ends of runs or bays are closed by polished wood panels. Backs are recessed into rebates in the uprights and are secured by panel pins or screws. Uprights and shelves are edged with solid hardwood sections. Two types of upright are available: (A) solid timber with drillings to accept the shelf pegs and (B) with  $\frac{1}{4}$ in pegboard inset panels, shelf pegs fitting into the existing holes (9in depth and upwards). Materials: uprights and shelves,  $\frac{1}{4}$ in veneered particle board;

backs, 6mm ply or  $\frac{1}{4}$ in hardboard or pegboard; end panels, veneered plywood; panel insets,  $\frac{1}{4}$ in-thick pegboard. Standard finishes: sapele, mahogany and natural oak with backs in matching plywoods. About 20 other veneers are available to order and, in addition, contrasting finishes can be used for the various adjacent components. Standard sizes: 6ft or 7ft high with bay lengths of 3ft, 2ft 6in and 2ft. Shelf depths: 6in, 7 $\frac{1}{2}$ in, 9in and 12in. Other sizes can be provided. Londonia can also be fitted with light pelmets provided with continuous fluorescent strip-lighting and the pelmets can either be finished to match the shelving, veneered in contrasting wood or covered with a variety of other materials. Accessories: sliding doors, glass fronts, sloping shelves, magazine-periodical displays, pigeon holes and vertical dividers.

*S.D.F. Equipments Ltd. (Londonia Div.), Conran Street, London W.10.*

*Readers' Information Service, Ref. F. Date 31/8/60.*

\*

### Plastic-based Paint

Polytile plastic glaze is a new special purpose coating formulated for use in hospitals, food factories, breweries, schools, etc. It is specially suitable for use in conditions where hygienic requirements are stringent or where a high degree of resistance is required to humidity, chemicals, solvents, fats and greases. It can be applied either by brush or by spray and dries to a smooth coating with almost tile-like hardness and a high-gloss finish. It is suitable for use on most types of constructional materials such as plaster, plasterboard, cement, brick, wood, hardboard and asbestos board and also to iron and steel. It is claimed to be heat resistant up to a temperature of 400 deg F, resistant to hot and cold water and also to water vapour. Polytile can be cleaned with detergents and disinfectants. It is obtainable both as a clear colourless glaze and in a wide range of colours.

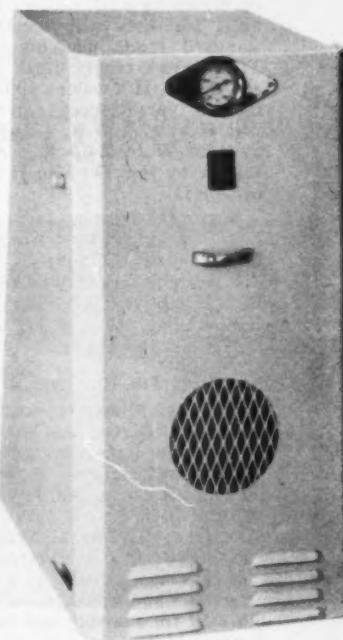
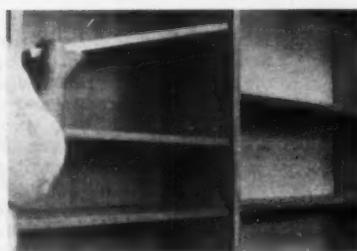
*Corrosion Ltd., Southampton, Hants.*

*Readers' Information Service, Ref. G. Date 31/8/60.*

\*

### Domestic Oil-fired Boiler (H)

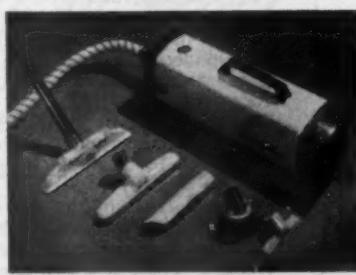
The Wyatt domestic oil-fired boiler is fired by a Blue Flame type Oilforno burner and is capable of providing a normal hot-water supply in addition to heating radiators. It is produced in four sizes, Nos. B2, B3, B4 and B6 with respective hot-water and heating ratings of 20,000, 33,000, 40,000 and 60,000 B.Th.U./hr. The relative ratings for heating only are 17,000, 28,000, 35,000 and 54,000 B.Th.U./hr. The burner is gravity-fed from a main storage tank and automatic control is obtained by means of a thermostat in the boiler. The control box automatically regulates the flow of oil to the



Top : Londonia prefabricated wooden shelving (F)

Centre : The Wyatt domestic oil-fired boiler (H)

Below : The Electrux Model 64 suction cleaner (E)



burner, giving either a full flame or a small pilot flame to maintain the desired temperature. It is claimed that the Wyatt boilers are noiseless and odourless in operation and safe from flooding by virtue of a special safety device incorporated in the control box which shuts off the flow of oil should the burner become extinguished. In addition, the flue box is designed to make the boiler independent of draught. The boilers are of welded steel construction, finished either in white or cream (special colours also available) and they will operate on any standard grade uncoloured paraffin. Temperature range: from 120 deg to 165 deg F. Hot-water cylinder: 30gal indirect type. Respective overall sizes: 24in H by 12in W by 12in D; 30in H by 15in W by 14in D; 32in H by 16in W by 16in D; 36in H by 18in W by 18in D.

*Wyatt Oil Heaters Ltd., Rickmansworth Road, Chorleywood, Herts. Chorleywood 2297.*

*Readers' Information Service, Ref. H. Date 31/8/60.*

★

#### New Roof Tile (I)

The Marley Modern concrete roof tile has been introduced to meet the demand for large tiles giving a roof without corrugations or fluting. The tiles measure 13in wide by 16½in long and can be laid at pitches lower than those normally used. They can, in addition, be laid to a variable gauge, thus making it possible to increase the head lap. The new tiles comply with B.S. 550 for porosity and hardness.

*The Marley Tile Co. Ltd., Sevenoaks, Kent. Sevenoaks 55255.*

*Readers' Information Service, Ref. I. Date 31/8/60.*

★

#### Solid Fuel Convector (J)

The Sofono Super-View convector open fire has been redesigned to incorporate a back boiler and the non-boiler model now meets with the requirements of the revised B.S. : 1251. It is to be known as the Mark II. Basically the design remains the same but the convection outlet grille is now not adjustable and the throat restrictor is independently controlled. The boiler model, when operated without a deepening bar, will provide domestic hot water service and also heat a towel rail. When operated with a deepening bar it will, in addition, serve up to 40 sq ft of radiator surface. Radiation and convection output from the open fire is stated to be suitable for heating rooms of up to 1,750 cu ft capacity. The unit comprises two sections and is suitable for prepared fireplace openings from 16in to 18in wide by 20in to 24in high by 14in deep, measured from the front of the fire surround. The rear section forms the boiler flue unit and is constructed mainly in refractory. There is a cast iron damper

frame and sliding damper. The front section consists of the self-setting convector open fire, with self-contained convection chamber and adaptor for sealing to the boiler flue unit. Finish: vitreous enamel in a wide range of colours. Boiler dimensions: 11in wide by 9½in by 3in at base and 4in at top.

*Sofono Division, Grange-Camelon Iron Co. Ltd., Falkirk, Scotland.*

*Readers' Information Service, Ref. J. Date 31/8/60.*

★

#### Industrial Vacuum Cleaner (K)

The Air-o-Flow industrial vacuum cleaner works on the Venturi principle off compressed air at or above the standard pressure of 80lb p.s.i. There is no electricity required and the machine has no moving parts. It is capable of handling broken glass, fluids, swarf, metal cuttings, inflammable liquids and such items as nuts and bolts. The machine has been tested by several well-known and established industrial concerns and has now gone into quantity production. The makers anticipate that the majority of its sales will be in the boat building, motor, textile and aircraft industries and in garages. Three interchangeable nozzles are provided for the removal of debris and liquids and simple connections can be made on suitable positions on existing air lines. It gives a suction of 45in water gauge, i.e. strong enough to hold 1½lb weight at the nozzle. Air consumption of the Air-o-Flow is at the rate of 9 cu ft/min and it is trigger operated for intermittent or continuous cleaning. There is a steel container mounted on a mobile stand and the total weight of the unit is 14½lb. Overall dimensions: height—23½in; container—16in high by 11in dia. Finish: container—stove enamelled orange with blue dome. Price: £33.

*Exhall Grinding & Engineering Co. Ltd., Bayton Road, Exhall, Coventry. Bedworth 3192.*

*Readers' Information Service, Ref. K. Date 31/8/60.*

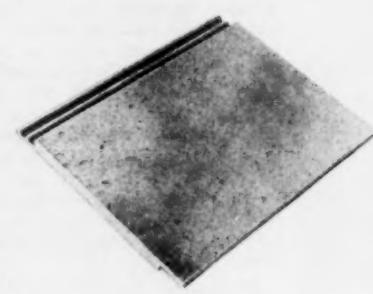
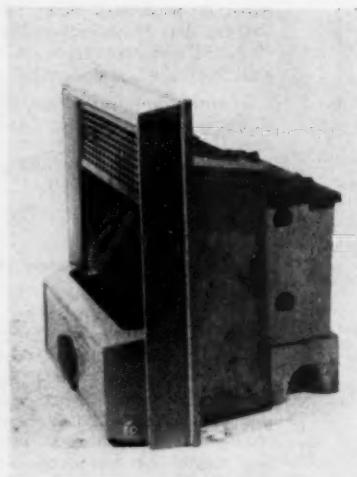
★

#### Improved Plan Chest

The Glenhill Economy plan chest has been redesigned to incorporate several improvements. Drawers are fitted with wider handles and hoods at the rear to prevent plan curling during storage. The top has been reinforced to provide a better working surface, construction is stronger throughout and the finish better. The six-drawer Economy chest is made from selected hardwoods in two interlocking sections and is finished in light oak. Three-drawer sections on individual stands are also available. Price (six-drawer unit): Double Elephant—£25 10s; Imperial—£21 10s; Antiquarian—£33.

*Glenhill (Office Furniture) Ltd., Green Lane, Hounslow, Middx.*

*Readers' Information Service, Ref. L. Date 31/8/60.*

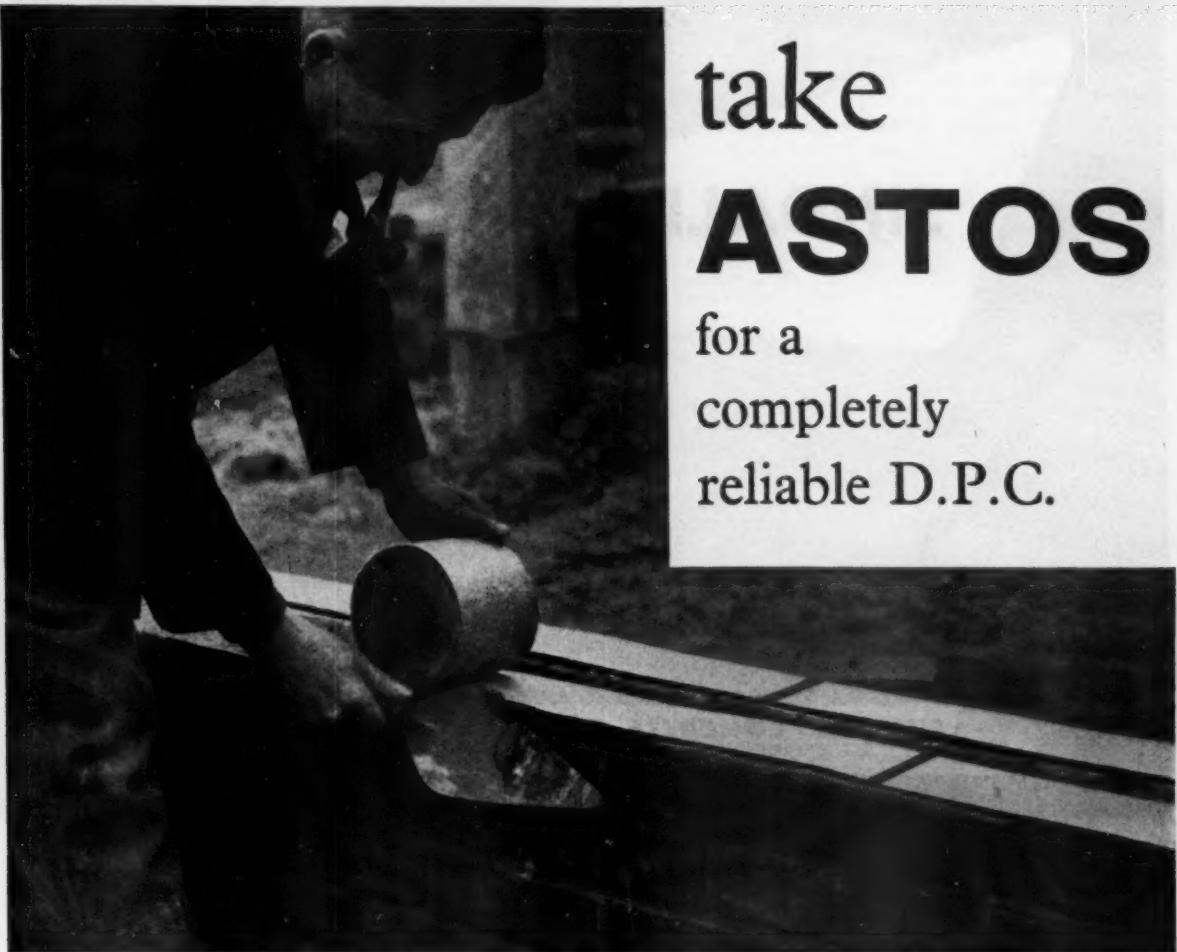


Top: The Sofono Super-View convector open fire (J)

Centre: The Marley Modern concrete roof tile (I)

Below: The Air-o-Flow industrial vacuum cleaner (K)





take  
**ASTOS**  
for a  
completely  
reliable D.P.C.

An Astos dampcourse gives permanently effective protection. It cannot be damaged by vibration and normal settlement.

Astos is easily identified on site by the gold band and black lettering. (Green lettering for lead-lined Astos). The original asbestos/bitumen dampcourse, it complies fully with British Standard requirements. Available in 24 ft. rolls in

wall widths up to 36 inches. Type 5C, 7 lb. per square yard. Lead-lined (Type 5F) 9½ lb. per square yard.



This mark appears on a gold band on all Astos dampcourses at 8 ft. intervals.

take **ZYLEX** slaters' felt

to complete the weatherproofing, provide a completely dependable secondary roof, reduce heat losses. Reinforced Zylex for open rafters, Standard for boarded roofs, Aluminium Foil Surfaced for even greater insulation.

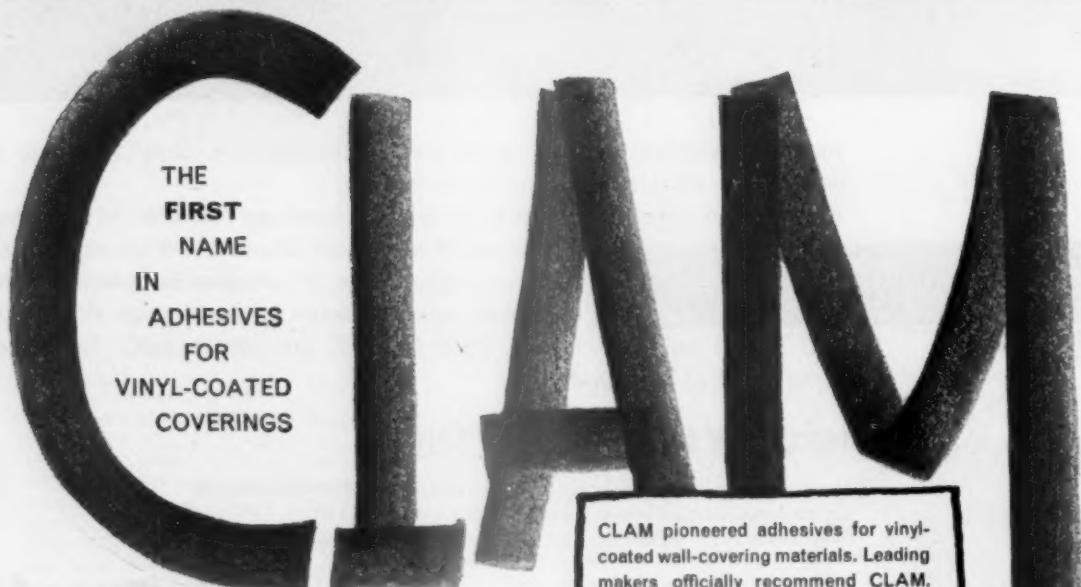
**Specify RUBEROID and you specify the BEST!**

We will gladly supply full details of Ruberoid bituminous products. Write or telephone:—

**THE RUBEROID COMPANY LIMITED** 91, COMMONWEALTH HOUSE, 1-19 NEW OXFORD STREET, LONDON, W.C.1.  
Holborn 8601 (5 lines)



EASII



Which CLAM Adhesive for which job? Find out from:  
**LONDON PASTE COMPANY LTD.**  
Arlington Works, Arlington Avenue, London, N.1. Ring CANonbury 7126

These prices apply to material purchased in the quantities named or otherwise as might be expected for a new building of moderate size. They include delivery and are the material basis used in the build-up of "Measured Rates" and subject to the conditions heading that schedule. Prices are under careful constant review but should be confirmed.

31 August, 1960

## AGGREGATES AND SAND

1½in—all in—ballast .. . . .	26/6	Yard cube
½in do. do. .. . .	27/-	delivered
½in screened shingle .. . . .	24/6	(in five-yard
½in do. do. .. . .	25/9	loads or
½in granite chippings .. . . .	46/-	more)
Sharp washed sand .. . . .	27/-	
Pit sand .. . . .	24/-	
Building sand .. . . .	23/6	
Broken brick .. . . .	21/-	
1½in shingle .. . . .	22/-	
Cartage of muck .. . . .	10/-	

## BUILDING MATERIALS AS DESCRIBED, CENTRAL LONDON

## CEMENTS packed in paper bags

	Per ton
Portland in 6ton lots .. . . .	110/-
Do., from 1ton to 5ton 19cwt do. .. . .	122/-
Do., Rapid hardening (6ton lots) .. . . .	120/6
Do. (but 1ton to 5ton 19cwt) .. . . .	132/6
Cement "Aquadcrete" (do.) .. . . .	154/6
Do., "417" or "Polar" (do.) .. . . .	154/6
Do., "White" 1ton (lots) .. . . .	275/6

## LIME—

Hydrated .. including ..	134/6 (1ton loads) deliv'd
White .. Bags ..	132/- (2/3 do.) do. 122/- (4/5 do.) do. 120/- (6 do.) do.

## PLASTER—

Keenes, coarse, pink .. . . .	239/6 ton
Do. do. white .. . . .	244/9 do.
Sirapite, do. .. . . .	179/9 do.
Do. finish .. . . .	187/6 do.
Hardwall, do. .. . . .	179/9 do.
Plaster, coarse, pink .. . . .	168/3 do.
Do. do. white .. . . .	177/9 do.
½in Gypsum Plaster Lath ex works (600sq yds)	2/3½sq yd.
½in Do. do. Wallboard do. .. . .	2/6½ do.
3½in Jute scrim (100yd roll) .. . . .	10/7 each
Cow hair (under 3cwt) .. . . .	62/3 ½cwt

## FIRECLAY—

In non-returnable bags (1ton lots) .. . .	217/3 ton delivered
Fire cement .. . . .	12/3 14lb

## BRICKS

## BACKING BRICKS (in truck loads)—

Flettons .. . . .	122/- per	1,000 delivered
Do. Keyed .. . . .	124/-	do.
Do. bullnose .. . . .	164/-	do.
Blue wirecuts (Net) .. . . .	547/-	do.
White .. . . .	202/-	do.
Southwater engineering (Class A) .. . . .	400/6	do.
Firebricks—2½in .. . . .	97/6 per	100 delivered
Do. —3in.. . . .	117/-	do.

## STOCK BRICKS—

Mild stocks .. . . .	205/- per	1,000 at Works
Second, do. .. . .	284/-	do.
First, do. .. . .	320/-	do.

Add for delivery—approx. 55/- per 1,000 in lorry loads.

## FACINGS (ex truck or lorry)—

Rustics .. . . .	162/- per	1,000 delivered
White .. . . .	220/-	do.
Blue pressed, 2½in (Net) .. . . .	614/-	do.
Do. bullnose .. . . .	633/-	do.
Reds (Multi sand faced) .. . . .	350/-	do.
White glazed stretchers .. . . .	1696/-	do.
Do. headers .. . . .	1670/-	do.
Do. bullnose .. . . .	2120/-	do.
Do. double stretchers .. . . .	2053/-	do.
Do. double headers .. . . .	2173/-	do.
Breeze fixing bricks .. . . .	30/6 per 100	
Fire tile and lumps .. . . .	34/- ft cube	
Wall ties—8in by ½in by ½in, galvanized .. . . .	77/3 per cwt	
Cement mortar (1 : 3) hand-made .. . . .	94/- yd cube	

## BRICKLAYERS' SUNDRIES—

AIR BRICKS	9 by 3in	9 by 6in	9 by 9in	12 by 9in
Iron .. each	2/10	4/7	6/10	9/2
Galvanized .. do.	4/10	8/-	11/11	14/6
Terra Cotta .. do.	1/2	2/4	5/8	11/2
Chimney pots, Terra Cotta (10 to 25) do.	1ft 9/4	2ft 16/3	3ft 37/3	4ft 64/6

## PARTITIONS—

18in by 9in Blocks keyed for plastering	2in	2½in	3in
Per yd super in 6ton lots	3/9	4/4	5/3
In cold clinker including any half blocks	3/11	4/7	5/3
In cellular clinker blocks	—	—	—
In hollow clay blocks	—	4/6	5/7

Clinker blocks in small quantity	6/5	7/9	9/1
Intermediate quantities in all types may be had at intermediate prices.			
Smooth in lieu of keyed faces extra cost per side 3d per yd super			

## SINKS—

Fireclay white glazed in and out—standard quality	24 by 18in	30 by 18in	30 by 20in
London pattern, no overflow, 6in deep .. . .	70/6	98/-	118/9
Belfast, plain edge, 10in deep .. . .	89/6	156/6	190/-

## FLUE, LININGS, PLAIN, CIRCULAR (FIRECLAY)—(UNDER 10)

Foot lineal	Each
Straight	Bends
9in diameter .. . . .	5/- 15/-
10in do. .. . . .	6/1 18/3
12in do. .. . . .	11/9 35/3
9in diameter, beaded end, 12in high .. . . .	6/9

## FLUE PIPES AND FITTINGS—

4in	5in	6in
Heavy asbestos type, 6ft length .. . .	18/6	25/6
Do. 3ft length .. . . .	9/3	12/9
Do. bends .. . . .	7/2	9/- 10/8
Light asbestos type, 6ft lengths .. . .	16/-	20/- 23/6
Do. 3ft length .. . . .	8/-	10/- 12/9
Bends .. . . .	5/7	7/1 8/8
Baffler .. . . .	15/5	18/4 19/4

## DRAINAGE GOODS

## GLAZED STONEWARE STANDARD LIST (NOV., 1956)

4in	6in	9in
ORDINARY TYPE—Each		
Pipes in 2ft lengths .. . . .	3/4	5/- 9/-
Bends .. . . .	5/-	7/6 20/3
Junctions (4in on 4in, 6in on 6in, 9in on 9in) .. . . .	8/4	12/6 27/-
Gullies with 4in outlets .. . . .	12/6	13/9 22/6
4in horizontal inlets .. . . .	4/-	4/- 4/-
4in vertical do. .. . . .	6/-	6/- 6/-
Black iron grids .. . . .	1/6	2/10 5/6
Adjustment to Current Cost		
2ton lots or more		Less than 2ton lots
2in to 9in diameter .. . . .	100 pieces	Under
"Best" pipes and fittings .. . . .	or more	100 pieces
Percentages to add .. . . .	+7½%	+12½%
Further percentages to be independently added in respect of:		
British Standard pipes, etc., 10. "Best" Tested pipes, 37½.		
British Standard Tested, 47½.		

## IRON DRAINAGE GOODS—

Each	4in	6in
Cast iron pipes, 9ft long .. . . .	105/9	154/9
Do. 6ft do. .. . . .	75/6	116/-
Do. 4ft do. .. . . .	57/6	89/-
Do. 2ft. do. .. . . .	35/-	52/9
Short bend .. . . .	23/9	63/9
Junction .. . . .	42/-	101/-

**DRAINAGE GOODS—Continued**

<b>GULLEY PARTS—</b>	4in	6in	
Traps, high level, invert ..	34/5	93/2	each
Inlet, bellmouth pattern ..	18/3	36/3	do.
Do., with one vertical branch ..	31/7	59/5	do.
Do., with two do. ..	85/8	124/8	do.
Extra for sealed cover ..	11/-	14/1	do.

**RAINWATER SHOES—**

With vertical inlet and rebated top ..	45/-	90/-	each
Extension piece ..	19/9	23/9	do.
Flat loose coated grating ..	4/8	4/8	do.
Loose solid coated cover ..	6/3	6/3	do.

**MANHOLE CHANNELS, WHITE GLAZED—**

Each	4in	6in	9in
Straight, 2ft long ..	19/2	28/1	47/2
Taper, do. ..	31/11	31/11	48/5
Bends, main, half section ..	37/-	53/7	88/-
Do., branch, do. ..	22/11	31/11	—
Do., do. three quarters, do. ..	31/11	51/-	—
Junctions, single ..	30/7	53/7	—
Do., double ..	42/1	72/8	—

**BROWN GLAZED CHANNELS—**

Based on standard list (less than 100 pieces)	4in	6in	9in
Half-round main channel (2ft long) ..	2/6	3/9	7/4
Extra for stop ends ..	2/6	3/9	6/9
Extra for outlets ..	5/-	7/6	—
Channel bends with splayed ends ..	7/6	11/3	—
Three-quarter section do. ..	10/-	15/-	—

**MANHOLE COVERS—**

24 by 18in foot traffic ..	31/9 each	Black
Do. Strong do. ..	58/3 do.	
Do. Light car traffic ..	102/- do.	
Do. Road traffic ..	130/- do.	

**SUNDRIES—**

Manhole steps (for 9in) ..	9/9	Galvanized
4in Mica valve fresh air inlets ..	18/3	each
Plumber's hemp ..	9/-	do.
Gaskin, caulking ..	1/54	per lb
Canvas backed hair felt, 4in wide ..	9d	do.
		per ft run

**ROOFING MATERIALS****WELSH SLATES (delivered)—**

Sizes in inches	per 1,000	Quantity		
		Full Loads	500 to 999	1 to 49
22 by 11 ..	2260/-	277/3	40/9	
20 by 10 ..	2070/-	251/6	37/-	
18 by 10 ..	1420/-	172/3	25/3	
16 by 10 ..	1120/-	133/3	19/9	
14 by 9 Damp Course	668/-	75/9	11/3	
14 by 4½ ..	328/-	33/3	4/9	

**TILES (Brosley and Staffordshire)—**

10½in by 6½in Machine made, 6ton lots ..	302/6	per 1,000	per 100
Do., hand made, sand faced (Berks red) ..	327/-		47/3
Hips, valleys and angles ..	36/3 per dozen		
Plain concrete tiles ..	210/6	per 1,000	per 100
			25/6

Sheeting asbestos corrugated, 6in pitch ..	8/3½	yd super
4½in by 16 gauge, drive screws (galvanized) ..	18/3	gross
7½in by ½ hook bolts and nuts (do.) ..	65/6	do.
Washers, round, flat galvanized ..	4/10	do.
Do. do. bituminous ..	2/-	do.

**ROOFING FELT—**

Sanded bitumen felt (44lb) ..	1/1	yd super
Do., but 60lb in weight ..	1/7	do.
Inodorous felt, best quality ..	2/11	do.
Do., second quality ..	2/3	do.
Underlining ..	1/8	do.
Sheathing ..	1/8	do.
Galvanized felting nails ..	2/4	lb

**THERMAL INSULATION—**

½in Insulating Gypsum Baseboard (600sq yds) ..	2/9	sq yd
½in Do. Do. Lath do. ..	2/9	do.
½in Do. Do. Wallboard do. ..	3/-	do.
½in Asbestos (Fully-compressed) Sheet ..	8/4	do.
½in Insulating Cork Slabs ..	7/6	do.
Silicate Cotton (2ton lots) ..	1/6	ft cube

**STONE**

Free on rail London

Monks Park 10/3 St. Aldhelm 11/6 average in blocks of 17ft cu  
Portland brown Whitbed 9/10 average in blocks of 25ft cu  
Doulting 10/10 Beer 10,6**TIMBER**

Softwood—sawn—random lengths.

	Per standard	Per cubic ft
Carcassing quality ..	£105	12/8
Joinery quality ..	£125 and up	13/4
Plain edged unsorting flooring ..	90/-	110/-
per square ..	138/-	165/-
½in Hardboard 4/1 sq yd. ..	10d	1/12 1/5
½in Do. 6/6 sq yd. ..		
Larger quantities cost less.		

**SUNDRIES—**

Black hexagon bolts, nuts and washers, Each ..	1/1d	1/3	1/6
} 1/4	1/4	2/2	
} 1/10	2/5	3/1	
Sashline, hemp, good quality ..	No. 6	No. 8	No. 10
Per yd Run ..	10d	1/12	1/5
Floor brads ..		84/3 per cwt	
Cut Clasp Nails ..		85/6 per cwt	
Steel ordinary screws ..	1in No. 8	3in No. 8	6/3 per gross
Brass, do. ..	10/2	Do.	17/11

**HARDWOOD. Normal joinery quality.**

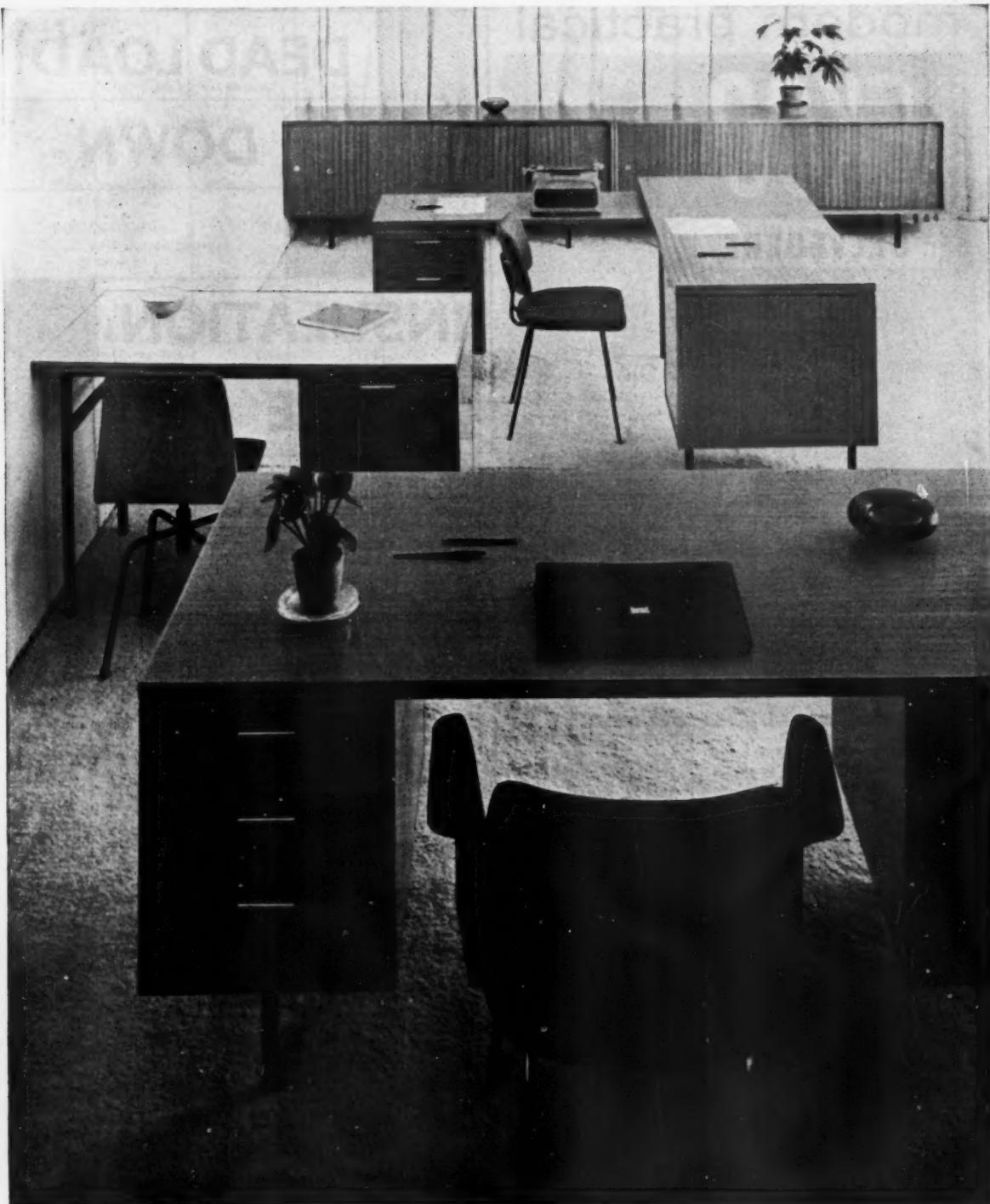
Mahogany, African ..	30/-	per ft cube
do. Honduras ..	66/-	
Teak, Burma and Siam ..	78/-	
Walnut, Australian ..	84/-	
Oak, English ..	42/-	
do. Yugoslavian ..	47/6	
Walnut, African ..	25/-	

**BUILDING BOARDS**

Description	Rate	Unit
16mm Birch blockboard ..	208/-	Per 100ft
22mm do. ..	257/-	super,
Austrian Mahogany faced one side, blockboard 18mm thick ..	367/-	but
Austrian figured Oak faced one side, blockboard 19mm thick ..	414/-	from one board
Beech, 6mm plywood ..	109/-	
Birch, do. ..	100/-	up to
Do. 9mm ..	142/-	
Teak faced one side, plywood 6mm thick ..	397/-	a
Austrian figured Oak one side, 6mm ..	222/-	
Australian do. Walnut do. do. ½in ..	296/-	bundle

**IRONMONGERY**

	2in	3in	4in	5in	6in
Cast iron Butts, per pair ..	1/5	2/5½	3/9	7/1	10/2
Hinges, spring, single action regulating, japanned, each ..	—	8/3	12/9	16/9	22/3
Do. but double action spring only, each ..	—	17/6	22/3	21/—	35/9
Do. blank only, each ..	—	10/3	14/—	28/—	24/3



**hille**  
CONTRACT DIVISION

**HANDSOME IS, HANDSOME DOES**—with his new Status Group, Robin Day introduces a truly protean modernity. At remarkably low prices, considering the materials and workmanship employed. Several basic broad desk tops, pedestals, panels, tables and storage cabinets; practically infinite permutations, to match any space and function—for example L-shaped arrangements, for compact convenience. Mahogany, walnut, teak or rosewood veneers, working tops timbered or light grey melamine, hardwood lipped. Square-section steel frames and legs, matt black or satin chrome. Many harmonious Hille chairs. Visit our showrooms, 39/40 Albemarle Street, London, W.1, Hyde Park 9576, or 24 Albert Street, Birmingham 4, Midland 7378, or write for brochure.

*Internationally-honoured furniture for homes and offices*

**modern practical**



The famous Ekco 'Belvedere' is a toilet seat of the highest quality—good looking, practical, and completely hygienic. It carries a 10 year guarantee and is available in 16 permanent and stainless colours. The 'Belvedere' is the ideal toilet fitting for new houses.

- \* Lid completely encloses seat
- \* Fitted with non-porous 'screw-in' rubber buffers
- \* All fittings chromium plated
- \* Available with straight or cranked pillar hinges
- \* Easily and quickly installed

**RETAILS FROM 61/6**

We shall be pleased to send you a brochure of the complete range of Ekco Quality Toilet Seats.

# EKCO

**PLASTICS  
TOILET WARE**

EKCO PLASTICS LTD • SOUTHERN-ON-SEA • ESSEX

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One of the oldest and best of building materials has been developed to produce the striking results indicated above.

## 'SIRAPITE'<sup>(Regd.)</sup> **LIGHTWEIGHT PLASTERS**

are produced by the makers of the long-established 'Sirapite' brand of gypsum plasters, and incorporate a lightweight aggregate either Vermiculite or Perlite.

These new ready-mixed plasters may not only cut the plaster dead load on a structure by as much as two-thirds, and provide improved thermal insulation; they offer STILL GREATER RESISTANCE TO FIRE, MINIMISE CRACKING, ensure STRICT UNIFORMITY OF MIX and GREATLY FACILITATE SITE WORK; the material only needs the addition of clean water.

Always the most satisfactory internal finish, plaster has now become the modern treatment for walls and ceilings.

Please ask for literature

### **THE GYPSUM MINES LTD.**

Kingston-on-Soar  
Nottingham

Telephone : Gotham 364/5.

Mountfield, Robertsbridge  
Sussex

Telephone : Robertsbridge 234.

## IRONMONGERY—Continued

	12in	18in	24in	30in	36in
Tee hinges (japanned)					
per pair ..	2/-	3/10	—	—	—
Do., but stronger, per pair ..	3/4	6/1	8/3	—	—
Hook and Ride hinges, per pair ..	—	—	20/5	27/8	33/11
BOLTS—each—	3in	4in	6in	8in	10in 12in
Cabinet, barrel, straight or necked ..	1/11	2/3½	3/1	—	—
Square spring, with brass knob ..	1/11	—	3/8	4/11	6/2 7/2
Tower bolts ..	—	2/7	3/8	4/11	6/2 7/2
Barrel bolts ..	—	3/10	5/6	7/3	9/4 11/5
Add to Tower or Barrel bolts if necked ..	9d	9d	1/4	1/3	1/3 1/3
LOCKS—each—					
Rim lock, 2 lever, wrote case, brass bolt and bushing ..	13/6	Brass furniture or Bakelite do. ..	5/- 3/3		
Mortice lock, 2 lever, bushed 13/6		Bakelite finger-plates 2/8			
Cylinder latches, japanned case ..		Brass furniture or Bakelite do. ..	8/9 3/10		
Brass sash fastener ..		each 5/-			
Casement fasteners (malleable) ..		do. 1/8			
Do. stays (do.) ..		do. 2/3			
Axle pulleys (brass face, iron wheel) 1½in ..		do. 3/3			
Do. as last, but with brass wheel 1½in ..		do. 4/11			
Sash line, No. 8 Anchor, yellow label ..		per yard 1/2½			

## METAL GOODS

British rolled steel joists ex mills to basis sections on site (6in by 5in, 8in by 5in or 6in, and 10in or 12in by 6in) .. £42/10/0 per ton

### Extra cost over basis for following sections—

9in or 18in by 7in, 14in by 5½in, 15in by 5in, 14in or 15in or 16in or 18in by 6in, 20in by 6½in, 20in by 7½in, 10in or 12in or 14in or 18in by 8in ..	10/- per ton
5in by 4½in, 7in by 3½in, 13in by 5in ..	15/- do.
12in by 5in, 22in by 7in ..	20/- do.
6in by 4½in, 7in or 8in or 9in by 4in, 10in by 5in ..	25/- do.
4in by 3in, 10in by 4½in ..	30/- do.
5in by 2½in, 5in by 3in ..	35/- do.
6in by 3in, 24in by 7½in ..	40/- do.
3in by 3in ..	50/- do.
4½in by 1½in ..	65/- do.
3in by 1½in, 4in by 1½in ..	70/- do.
1in mild steel reinforcing rods ex mill d/d ..	£41/0/0 do.

### Extras per ton

½in or ¾in diameter in size ..	15/- per ton
½in ..	30/- do.
¾in ..	62/6 do.
½in ..	92/6 do.
¾in ..	132/6 do.
½in ..	172/6 do.

### Extras for length

5ft to 3ft ..	7/6 do.
3ft to 2ft ..	15/- do.
2ft ..	22/6 do.
40ft to 45ft ..	15/- do.
45ft to 50ft ..	22/5 do.
Boats and Nuts ..	112/- per cwt

Trench covering, including trays 1½in deep and rebated frames, 9in wide ..

Do., but 12in wide ..	27/- do.
Do., but 14in wide ..	30/- do.
Do., but 18in wide ..	39/- do.

## METAL SUNDRIES

Cast iron pavement lights with 4in by 3in prism and convex lenses in alternate rows ..

Iron single fire doors, panelled both sides, pivot hung and self closing, to angle frame rebated and lugged, to meet fire regulations ..

24 gauge galvanized Tallboy 6ft high, 9in diameter with 9in by 12in base ..

per  
33/- ft super

54/- do.

55/- each

## CHAIN LINK FENCING—

2in mesh	In 25 yards lineal rolls inclusive of line wire.				
	Height in inches—				
	36	42	48	60	72
10½in wire gauge ..	129/-	150/6	172/-	215/6	258/3
12½ do. ..	90/-	104/9	119/9	149/9	179/9
14½ do. ..	62/9	73/6	83/6	104/9	125/6

## DOUBLE SOOT DOORS AND FRAMES—

Fitted with brass turn-buckle and cast key	9in by 9in	12in by 9in	14in by 12in
	26/6	38/6	66/3

## SLIDING DOORS, GATES AND PARTITIONS—

Factory sliding doors in two leaves containing about 100sq ft with mild steel angle frames covered with 24 gauge corrugated galvanized sheeting and including hanging tubular track and gear complete ..	18/6 ft super
Factory entrance gates with mild steel frames clad with 2in mesh chain link complete ..	16/6 do.

## STEEL ROOF LIGHTS—

In Skylights and Lanterns, Standard type with puttyless glazing, lead flashings, and ¼in rough cast glass; in the case of Lanterns 18in vertical sashed sides are provided in addition.

Size at Base	6ft by 4ft	8ft by 6ft	10ft by 8ft
Skylights ..	£35 5	£50 10	£69 10
Lanterns ..	£55	£76 5	£110

## HIGH GRADE DOMESTIC BOILERS—

Coke Fed. Performance 20 to 40 gallons raised from 40°F to 140°F per hour as under.

TYPE	£ s. d.
20 gallons per hour	
15in wide, 23in high	Enamel finish .. .. 11 10 0
25 gallons per hour	
17in wide, 26in high	Do. Grey Mottle .. .. 20 10 0
40 Gallons per hour	
22in wide, 30in high	Do. Cream Mottle .. .. 22 0 0
	Do. Cream Mottle .. .. 38 0 0

## GAS, WATER AND STEAM TUBES

### BASIC PRICES

Internal	½in &	Diameter—	½in	¾in	1in	1½in	2in
Tubes per ft	9½d	10d	1½	1½	1½	2/3	2/8
Bends each	1/7	1/9	2/—	2/6	3/8	5/5	6/2
Elbows, sq. do.	1/8	1/10	2/2	2/6	3/—	4/4	5/2
Do., round	1/10	2/—	2/4	2/10	3/4	4/8	9/4
Tees ..	2/—	2/2	2/6	3/2	3/8	5/—	6/2
Crosses ..	4/4	4/8	5/6	6/6	8/2	11/—	13/2
Backnus ..	4d	4d	6d	7d	10d	1/—	1/4
Sockets ..	6d	6d	8d	10d	1/—	1/4	2/6
Sockets ..	dimin.	do.	8d	10d	1/—	1/2	2/8
							4/-

### EX. STOCK IN ORDERS OF £10 OR MORE

### DISCOUNTS OFF BASIC LIST.

### TUBE—

Black	Galvanized
Medium (Blue)—35%	Medium—25%
Heavy (Red) —25%	Heavy —15%

### FITTINGS—

Black	Galvanized
Heavy —10%	Heavy —21%

## RAINFALLER GOODS (Painted or Unpainted)

In consignments of 5cwt and over  
From Standard List

Pipe:	2in	3in	4in	5in	6in
6ft lengths ..	each	12/10	14/5	18/11	24/8
3ft do. ..	do.	7/—	7/9	10/—	13/1
Shoe, ordinary ..	do.	2/7	3/10	5/7	9/5
Bend ..	do.	3/1	4/4	6/4	11/3
Branch, single ..	do.	4/6	6/7	9/3	14/7
Offset, 4½in ..	do.	3/9	5/3	7/9	12/11
Do. 9in ..	do.	4/11	6/6	9/8	15/3
H.R. gutter, 6ft length ..	do.	—	6/—	8/5	10/4
Angle or nozzle ..	do.	—	2/6	3/1	5/4
Stop end ..	do.	—	9d	1/1	1/6
					Above plus 25%

## PLASTERING MATERIALS

Sand, lime, cement and various plasters are previously included under those heads—	
Metal lathing (1in by 24G) (20 yards)	4/- sq yard
Plaster baseboard 1in (1,200 yards) ex works.	2/2/- do.
Lath nails, galvanized	1/6 lb
White glazed tiles (6in by 6in by 1in)	1 yd 26/9 sq yard
Do. rounded on one edge	to 32/9 do.
Do. on two adjoining edges	10 yds 36/3 do.

## PLUMBER'S GOODS

4lb lead sheet (in 1ton lots)	109/- per cwt
Lead water pipe in coils (do.)	111/3 do.
Plumber's solder	3/7 lb
Copper tacks	8/5 do.

## IRON SOIL AND WASTE PIPE. (5cwt lots and up)

each	2in	3in	3½in	4in
1in Medium pipe, 6ft length	14/6	17/2	19/3	21/11
Do., 4ft length	10/5	12/2	13/7	15/5
Bends	5/4	6/6	8/1	9/1
Do., with oval door	17/4	18/6	21/1	24/7
Junction, single	6/6	9/8	11/3	13/3
Do., with oval door	18/6	21/8	24/3	26/3
Swan necks, 4in	6/6	10/3	11/9	13/9
Do., 9in	8/8	11/9	13/9	16/1
Holderbar, 2½in projection	5/9	5/11	6/3	6/4
				Above plus 25%

GALVANIZED CISTERNS, TANKS AND CYLINDERS—  
(Less than three)  
each

gallons

## CISTERS

Bends over tops and corner plates. Riveted or welded	Nominal capacity			
100	100	150	200	300
14 gauge	174/-	235/-	295/-	417/-
12 gauge	211/-	292/-	344/-	464/-
½in plate	241/-	339/-	399/-	542/-

## HOT WATER TANKS

Riveted and with hand hole and ring	20	25	30	40
12 gauge	147/-	151/-	164/-	190/-
½in plate	165/-	168/-	184/-	211/-

## HOT WATER CYLINDERS—

Riveted, with handhole and ring	20	25	33	39
12in gauge	166/-	182/-	203/-	219/-
½in plate	181/-	200/-	221/-	240/-

## PLUMBER'S BRASSWORK, etc.

Each

	½in	1in	1½in	2in
Boiler screws, single nut	1/8	2/2	3/6	6/-
Do., double nut	2/4	2/11	5/6	8/-
Cap and lining	1/3	1/8	2/-	2/2
Plumber's unions	2/6	3/1	4/2	7/5
Ball valves, screwed iron	14/2	22/3	—	—
Do., fly nut and union	15/2	24/-	—	—
Bib valves, crutch top screwed iron	8/9	12/9	—	—
Do., but screwed boss	10/-	14/6	—	—
Stop valves, screwed iron	7/9	10/6	—	—
Do., screwed iron and union	9/6	13/9	28/6	—
Do., double union	0/9	15/6	30/-	—
Waste, plug chain and stay	—	—	8/6	9/6
Caps and screws	4/6	5/6	7/-	—
Sleeves, long	—	—	7/8	11/1
Do., short	—	—	4/6	4/8
Thimble	—	—	3/10	5/-
Full way gate valves, hot pressed	21/-	29/3	—	—
Lead 7lb P. trap	—	7/2	9/5	13/3
Do., S. trap	—	8/10	11/7	16/3
Lead 6lb P. traps with 3in seal	8/-	9/8	—	—
Do., but S. traps, do.	—	9/11	12/2	—
Wire balloon guards, copper, 2in, 3/8; 4in 4/-				
Do., galvanized iron, 2in 1/5; 4in 1/10				
Hair felt 34in by 20in, 24oz 6/- sheet				
Boss white jointing compound, 2/3lb				
Gasket, 1/10½lb. Hemp, 9/-lb				

## COPPER TUBES—Extract from B.S. 659/1955—

Nominal bore	Internal work (semi-hard)			3cwt lots	
	Outside diameter	Gauge	Weight lb per ft	Price per lb	Price per ft
½in	0.596	19	0.27	44½	12.02
¾in	0.846	19	0.39	42½	16.68
1in	1.112	18	0.62	41½	25.58
1½in	1.362	18	0.76	40½	30.88
2in	1.612	18	0.91	40½	36.98
2½in	2.128	17	1.40	42½	59.15

## CAPILLARY TYPE CONNECTIONS—

Add for delivery and packing on orders under £10.

All ends copper to copper	Each	½in	1in	1½in	2in
Straight	—	1/5½	1/10½	2/10½	4/0½
Elbow	—	3/4	4/1½	5/6½	8/7½
Tees	—	4/1½	4/8	6/9½	11/3½
Brackets (Brass)	—	2/10½	3/5	3/10½	4/0½

## GLASS

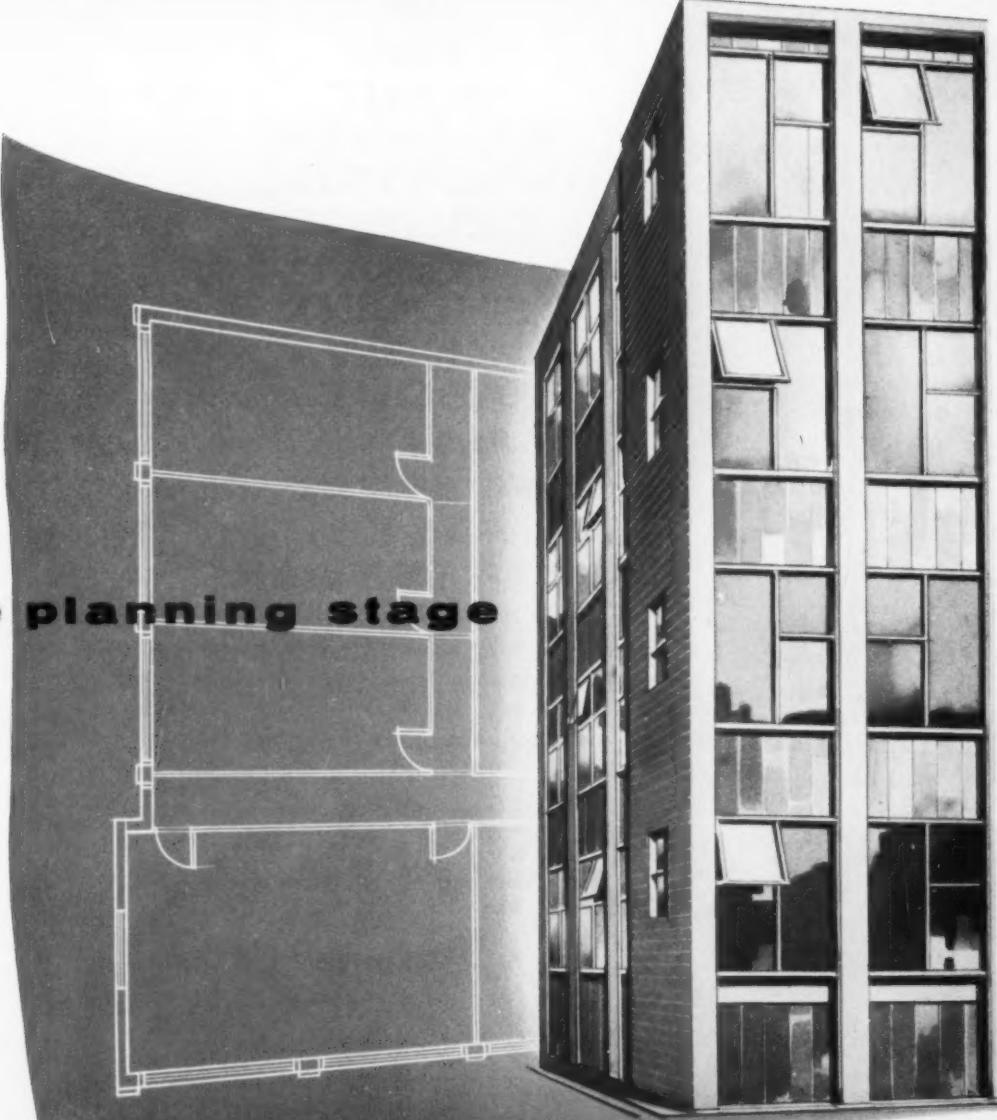
English, flat drawn sheet glass cut to sizes in squares	24oz	26oz	32oz	Per foot superficial
Figured rolled, white cut to sizes, in squares (½in)	11½d	1½in	1½in	1/6½ Per ft super
Ditto, but in standard tints	1/2½	do.	do.	do.
½in Rolled, cut to size, in squares	2/1½	do.	do.	do.
½in rough cast do.	1/5½	do.	do.	do.
½in wired do.	1/9½	do.	do.	do.
Georgian wired do.	1/9½	do.	do.	do.
Fluted (No. 1) do.	2/4½	do.	do.	do.
½in Reeded	2/4½	do.	do.	do.
½in Reedlye (narrow and broad) do.	1/7½	do.	do.	do.
Splotlyte do.	1/7½	do.	do.	do.
½in Calorex Cast do.	1/8	do.	do.	do.
Flashed Opal (15/18oz) up to 1ft super	4/2	do.	do.	do.
do. do. over 1ft super	5/-	do.	do.	do.
Pot Opal (15/18oz) up to 1ft super	4/2	do.	do.	do.
do. do. over 1ft super	5/-	do.	do.	do.

## POLISHED PLATE GLASS (Tariff) Cut to sizes.

Ordinary substance ½in and ¼in thick.	General Glazing
In plates not exceeding:	
2ft super in each	4/7
5ft do.	5/7
45ft do. (unless extra sizes)	6/9
100 ft do. (do.)	7/4
Extra sizes, i.e., Plates exceeding 100ft super or 160in one way or 96in both ways at higher prices.	

## DECORATING MATERIAL

	Price	Unit
Aluminium Paint	42/-	Cwt
Distemper, ceiling	39/-	Cwt
Distemper, washable	120/-	do.
Enamel (eggshell)	52/-	Gallon
Gold Metallic Paint	79/-	do.
Heat Resisting Paint	40/-	do.
Japan, black	35/-	do.
Knottting	40/-	do.
Linseed Oil (5gal)	16/-	do.
Boiled, do. (do.)	15/6	do.
Proprietary Paints (good class)—		
Finishing	57/6	do.
Priming (lead base)	57/6	do.
Undercoat	59/-	do.
Paperhanger's Paste	36/6	Cwt
Petrifying liquid	9/6	Gallon
Putty	54/6	Cwt
Size	12/3	Firkin
Terebine	22/-	Gallon
Turpentine substitute	6/5	do.
Varnish, oak, copal inside use	39/-	do.
Do., do., outside use	41/-	do.
Do., white, eggshell, flat	50/-	do.
White lead mixed paint	66/6	do.
White lead	167/6	Cwt
Whiting	13/3	do.



**At the planning stage**

consult

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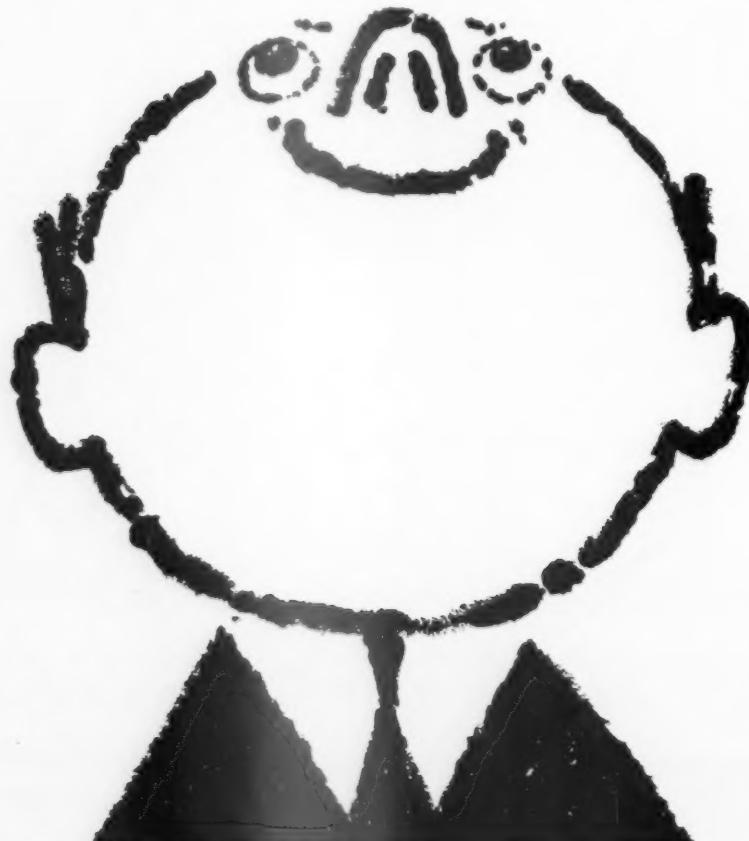
MANCHESTER  
BLACKFRIARS 9469

PORTSMOUTH  
Havant 2116

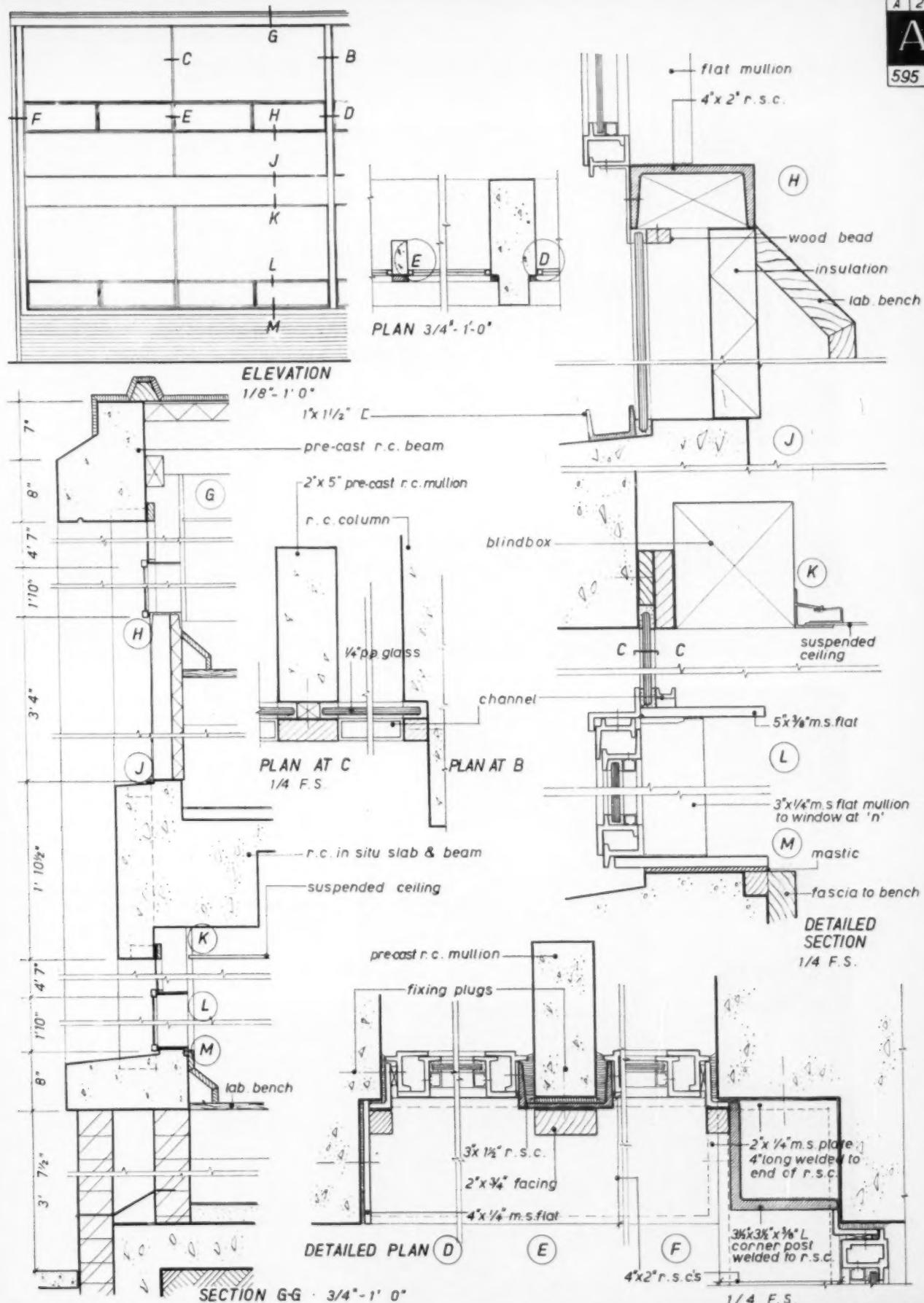
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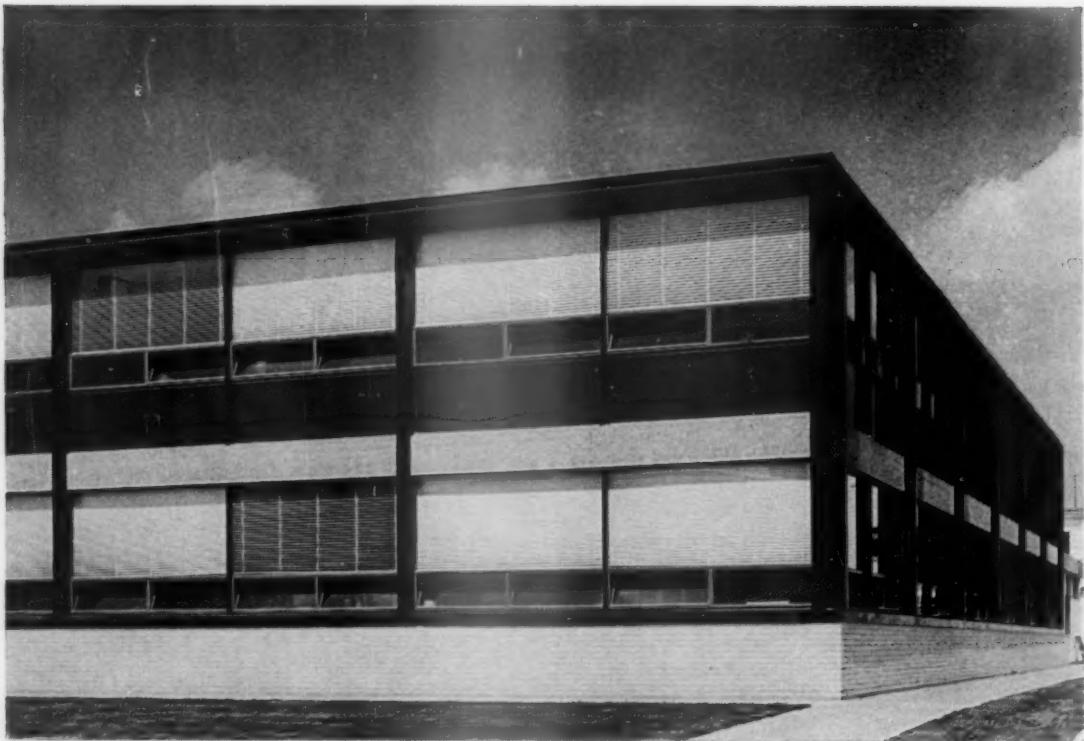
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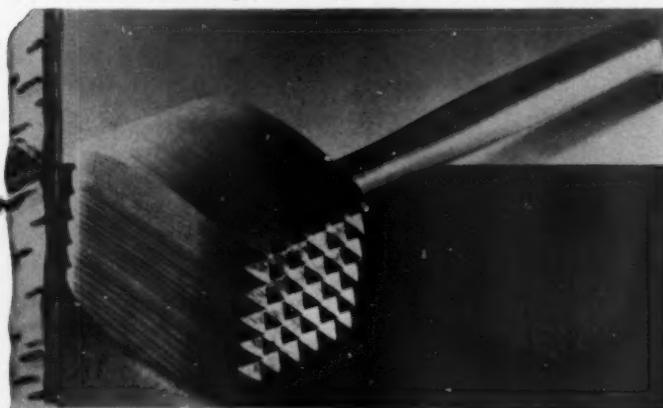
The pre-cast concrete frame was chosen for the speed of erection and for its inherent accuracy, this enabled the fixed light windows to be glazed directly into the P.C. frame, thus cutting costs. The P.C. columns are spaced at 20ft c/cs, this being the width of the laboratories. Internal ventilation extracts are the fume cupboards and the air inlets being the opening lights on the exterior. The P.C. frame is painted with black chlorinated rubber paint; the in situ concrete beam is bush hammered and bricks are white flint type. Wall details designed by Ove Arup & Partners

WALL DETAILS  
RESEARCH BLOCK, DUXFORD



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Lathe-worthiness:  
another strong  
point of Canadian  
Birch.

# **BRIGGS'** **answer\*** **to**

Another problem submitted to the Briggs Advisory Service, and successfully solved.

To achieve depth of feature on elevation, the Client in this case required the oversail to be deeper than the roof deck itself with an aluminium fascia and our usual flat aluminium soffit.

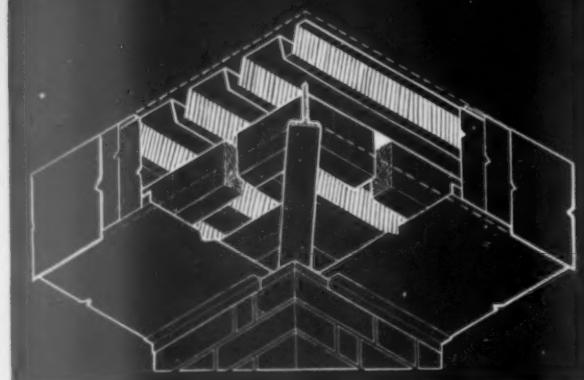
SOUTH LODGE HOSPITAL, ENFIELD

Architects: F. W. Mackenzie &amp; Partners



- \* This was achieved by the introduction of timber spacers below the oversailing roof deck units, to which the aluminium soffit was fixed, and the provision of an aluminium angle to bridge the gap between decking and soffit at the oversail line to waterproof the detail and to provide backing for the aluminium fascia.

The resources, technical knowledge and experience of the Briggs Organisation are at the disposal of every Architect and Engineer. Consult our nearest area office for further details of Briggs Technical Design Service.



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*the people to see  
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## How they use R·H·S

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Rectangular Hollow Sections (R.H.S.) are now being used for a wide range of mechanical and structural purposes. The sizes available in the Stewarts and Lloyds' range of hot-formed sections are listed in the accompanying table. R.H.S. eliminate the need for special shaping of components prior to welding. Any straight-cut R.H.S. or tube will fit accurately against their flat sides whether square-on or at an angle and, moreover, lugs of various kinds produced from tube or bar are easily attached. Welding is simple and no bevelling is necessary.

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THE COUNTRY STOCK R.H.S.

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TO THE  
PHYSICAL PROPERTIES  
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straight sliding  
**DOOR**

gear ...

folding  
**DOOR**

gear ...

around the corner  
**DOOR**

gear ...

power operated  
**DOOR**

gear ...



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THE Northern Polytechnic Diploma in Architecture, which is awarded on the successful completion of the five years' full-time course and subsequent passing of the examination in Professional Practice qualifies students for exemption from the Final Examination for Associateship of the Royal Institute of British Architects. The Diploma is also accepted by the Architects' Registration Council of the United Kingdom as a qualification for registration under the Architects (Registration) Acts, 1931-1938.

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Fees from 30s to 70s per session.

**PART-TIME DAY CLASSES**

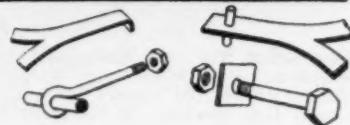
A leaflet describing part-time day courses will be sent on application.

Entry to the Schools. Intending day students are interviewed by appointment. Intending evening students will be interviewed from 5.30-7.30 p.m. on September 20 and 21.

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# Contract

## News

### WORK IN PROSPECT

**Bangor, Co. Down.** The Ministry of Health and Local Government has approved the redevelopment plan for the Castle Street/Castle Square area, estimated cost £250,000.

**Coleraine, Co. Londonderry.** Erection of a pavilion at the Ballycastle Road playing fields, estimated cost £8,000.

**Northern Ireland Ministry of Commerce.** Erection of the superstructure of factory at Lurgan for Industrial Accountancy Partnership Ltd. Apply to Room 28, 64 Chichester Street, Belfast.

**Northern Ireland Ministry of Finance.** Erection of Royal Ulster constabulary county headquarters at Armagh. Apply to Room 103, Law Courts Building, Belfast 1.

**Warwickshire C.C.** Rebuilding of Mapleborough Green C.E. and junior and infants' school, estimated cost £18,270. Erection of additional classroom and ancillary accommodation at Eastern Green C.E. infants' school, estimated cost £6,580. Completion of Kenilworth Castle high school to three-form entry standard, estimated cost £48,450.

The following works are to be carried out under the building programme for 1961-62: (a) completion of the Bidford-on-Avon high school, estimated cost £52,385; (b) erection of Rugby Abbots Farm county junior school for 320 pupils, estimated cost £61,475; (c) completion of Shipston-on-Stour high school, estimated cost £45,575.

The buildings committee has approved a proposal for the open shedding at the County Transport Repairs Depot to be adapted to form an enclosed workshop, total estimated cost £3,250.

The health committee has approved the erection of a combined clinic and library at Minworth, estimated cost £2,750.

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**Watford Corporation.** Plans submitted for (1) erection of (a) 12 flats, two bungalows and 12 garages in Leafield Crescent for Rice Brothers Ltd.; (b) showroom, petrol station and car repair depot in North Western Avenue and St. Albans Road for Commercial & Industrial Structures Ltd.; (c) office accommodation over garage and stores in Aldenham Road for B. Garrad Ltd.; (2) outline application (a) for five shops, 15 flats, and nine garages in St. Albans Road for G. R. Valli; (b) to convert Odeon Cinema in St. Albans Road into supermarket for Ravesen Properties Ltd.; (3) conversion and rebuilding of 101 High Street for Manfield & Sons Ltd.; (4) extension of offices in Clarendon Road for Holst & Co.

**Worthing Corporation.** Plans submitted for (1) erection of (a) church and car park in Chesswood Road, H. B. Towner for Rev. D. P. Wall; (b) church in Barrington Road/Shafesbury Avenue, Weston, Burnett & Thorne for Goring Congregational Church; (c) four-storey block of 18 flats with penthouse over and 25 garages in Grand Avenue, Godman & Kay for Heaven Constructions Ltd.; (d) seven-storey block of 40 flats, four-storey block of eight flats, two three-storey blocks of nine and 12 flats with garages and car ports in Goring Way and Jupp's Lane. M. Rainsford Fletcher & Partners for Dependable Properties Ltd.; (e) 10-storey block of 36 flats with 36 garages in Brighton Road, Gotch & Partners for Westminster Construction Co. Ltd.; (2) outline application for (a) 10-storey block of 30 flats, five-storey block of 15 flats, block of four flats with garaging under in Ardshead Road, L. H. Fewster & Gamble for J. W. Stratton Ltd.; (b) hall for St. Lawrence Church in Sea Place/Brook Barn Way; (c) 28 dwelling units in five blocks with 20 integral garages in Roedean Road; (d) 48 houses and garages and three-storey block of 12 flats in Murfield Road, James & Bywaters for R. J. Jarvis; (3) extension of All Saints Church hall in Cissbury Drive, L. F. Moulds for Findon Parochial Council.

### OPEN

Notes below give basic data of contracts open under locality and authority which are in a bold type. References indicate : (a) type of work (b) address for application. Where no town is stated in the address it is the same as the locality given in the heading (c) deposit (d) last date of application (e) last date and time for submission of tenders. Full details of contracts marked \* are given in the advertisement section.

**Aberystwyth B.C.** (a) Erection of two four-storey blocks of flats, together with access road, drains, etc., between Fourth

and Fifth Avenues, Penparcau. (b) Borough Surveyor and Water Engineer, Public Works Department, Park Avenue. (c) 3gn. (e) September 19.

**Basingstoke B.C.** (a) Construction of brick or block panel walls, concrete floors and similar works to two pre-cast concrete frame buildings with asbestos-clad roofs at the corporation depot. (b) Borough Surveyor, Municipal Buildings. (c) 2gn. (e) September 5.

**Bedford B.C.** (a) Erection of additional changing and clothes accommodation at Newnham Baths. (b) F. W. Dawkes, Borough Engineer and Surveyor, Newnham House, Horne Lane. (c) 2gn. (e) September 7.

**Birkenhead B.C.** (a) Erection of phase two of Overchurch primary school, Moreton Road, Upton. (e) September 9. (a) Erection of 18 flats and seven garages, Apple Grove, Well Lane. (b) for both Borough Architect, 3 Conway Street. (c) 2gn each contract. (e) September 12.

**Bucks Water Board.** (a) Office extensions and new workshops at Aylesbury, and three houses, car parks, roads, etc. (b) architects, Raymond White and Ridley, 4 Temple Square, Aylesbury. (e) September 5.

**Buckley U.C.** (a) Erection of 109 dwellings comprising three-storey flats, dwelling houses, old people's bungalows and garages. (b) Ronald S. Biggins and Associates, Richmond House, Boughton, Chester. (c) 5gn. (e) September 23.

**Cardiff C.C.** (a) Erection of 219 garages and site works in seven contracts as follows:—(1) Ely South 48. (2) Llanrumney 14, 18 and 23. (3) Llanishen 6 and 27. (4) Leckwith 10. (5) Gabalfa 14. (6) Fairwater 24. (7) Ely North 21. (b) City Architect's Department, Municipal Offices, Greyfriars Road. (c) 2gn each contract. (e) September 13.

**Caterham and Warlingham U.C.** (a) Erection of a block of six flats at Godstone Road, Whyteleafe. (b) Engineer and Surveyor, Council Offices, Caterham, Surrey. (e) September 12.

**Chatham B.C.** (a) Ordnance Street redevelopment area. Group 1: one three-storey block of 12 one-bedroom flats. 10 three-bedroom houses. Group 2: two four-bedroom houses. Contractors may tender for one or both groups. (b) J. A. T. Richards, Borough Engineer and Surveyor. (c) 2gn each group. (e) October 3.

**Chislehurst and Sidcup U.C.** (a) Erection of 12 flats in Windsor Road, Foothill. (b) Engineer and Surveyor, Manor House, Sidcup. (c) 2gn. (d) Immediately.

**Cornwall C.C.** (a) Separate contracts for sub-contracts. (1) Structural steel-work and (2) metal windows in connection with erection of a catering block and women's block at Cornwall Technical College, Trevenson Pool, Redruth. (d) September 1.

**Dee and Clwyd River Board.** (a) Offices and stores at Bala, and laying of water mains. (b) G. A. Wright, Officer and Clerk, 2 Vicars Lane, Chester. (c) 2gn. (e) September 9.

**Dewsbury B.C.** Construction of a mass concrete retaining wall, at Carlton Road infants' school. (b) Borough Engineer and Surveyor, Municipal Buildings, Halifax Road. (c) 2gn. (e) September 5.

**Doncaster B.C.** (a) Contract No. 698. Erection of 35 one-bedroom bungalows on various estates. (b) Borough Architect, 1 Priory Place. (c) 2gn. (e) September 19.

**East Retford B.C.** (a) Improvement to dressing accommodation at the public baths, comprising construction of 24 terrazzo dressing cubicles and laying of 86 sq yd of floor tiling. (b) Borough Surveyor, Municipal Buildings. (e) September 12.

**East Riding of Yorkshire C.C.** (a) Erection of two detached houses on the county secondary school at Filey. (b) County Architect, County Hall, Beverley. (c) £2. (e) September 20.

**East Suffolk C.C.** (a) Alterations and extensions to Cookley and Walpole V.C.P. school. (b) County Architect, County Hall, Ipswich. (d) September 2. (e) October 7.

**Hackney B.C.** (a) Conversion into self-contained flats of large houses. Inquiries invited from building contractors in the Metropolitan area who are able to accept this type of work during the next few months. (b) Housing Manager, 219 Mare Street, London, E.8.

**Hampshire C.C.** (a) Eastleigh North End county secondary school. Extensions and alterations including a two-storey practical block, assembly hall, kitchen and two-storey classroom wing. (a) Erection of two-storey practical blocks and extensions to kitchens at each of the following schools: (1) Petersfield secondary, (2) Bordon Mill Chase secondary, (3) Farnborough Fernhill secondary. (b) For each contract Jackson and Greenend, architects, Hinton Buildings, Hinton Road, Bournemouth. (c) 2gn each, by cheque, payable to County Treasurer. (d) September 9. (e) For each contract about October 12.

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**Harrow B.C.** (a) Rebuilding to corridor and porch at Harrow Weald Grammar school. (b) Borough Engineer and Surveyor, Cottesmore, Uxbridge Road, Stanmore, Middx. (c) £2, payable to Harrow Corporation. (e) September 20.

**Hunts R.C.** (e) Erection of 12 bungalows and eight flats. (b) Council's Surveyor, Montague House, Huntingdon. (c) 2gn. (e) September 14.

**Mablethorpe and Sutton U.C.** (a) Construction of two lavatory blocks at Bohemia Caravan Park. (b) Clerk of the Council, Council Offices, Mablethorpe. (c) 2gn. (e) September 7.

**Malvern U.C.** (a) Extensions and alterations to Priory Park swimming pool. (b) C. C. Judson, Surveyor and Water Engineer, The Council House, Malvern. (c) 5gn. (e) September 16.

**Manchester C.C.** (a) Erection of sports changing rooms at Hewlett Park playing fields, Clayton. (b) City Architect, Box 488, Town Hall. (e) September 6.

**North Riding of Yorkshire E.C.** (a) Erection of second instalment of county primary school at Huntingdon. (b) W. W. Atkinson & Partners, architects, 4 Raymond Buildings, Grays Inn, London, W.C.1, or F. Barracough, County Hall, Northallerton. (e) September 15 post-mark.

**Northfleet U.C.** (a) Erection of 12 houses in traditional brick construction on Painters Ash Estate. (b) Engineer and Surveyor, Town Hall. (c) 2gn. (e) September 12.

**Pwllheli B.C.** (a) Erection of 25 houses, with site and road works, at Ffordd y Mela, between South Beach and West End. (b) Town Clerk, Municipal Buildings. (c) 4gn. (e) September 17.

**Richmond (Surrey) B.C.** (a) Rebuilding the Corporation Depot, phase 1. This phase consists of demolition and rebuilding of stores and offices along Lower Mortlake Road frontage. (b) Borough Engineer's Office, King's Road, Richmond. (c) 5gn. (e) September 22.

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**Sheffield Regional Hospital Board.** (a) Erection of four villa blocks and two patients' workshops at Aston Hall Hospital, Aston-on-Trent. Estimated cost £200,000. (a) Development, phase two, children's group at Balderton Hospital, Newark. Estimated cost £180,000. (b) For both contracts E. F. Wilson, A.R.I.B.A., Fulwood House, Old Fulwood Road, Sheffield 10. (d) For both contracts September 2. A selected list of contractors will be drawn up.

**Shrewsbury B.C.** (a) Erection of 67 dwellings, 19 garages and one shop at Ditherington. (b) Borough Surveyor, Guildhall. (c) 2gn. (e) September 21. (a) Erection of 12 flats in three storeys, 12 three-storey houses, one shop with maisonette over in New Street. (a) Erection of six houses, two bungalows, two shops, 19 garages and alterations to Monkmore Hall Farm, in the Crowmoor district. (b) For both contracts Borough Surveyor, Guildhall. (c) For both contracts 2gn. (e) For both contracts September 21.

**Southampton B.C.** (a) Contract B.353. Erection of 20 traditional houses at Surrey House. Contract B.342. Erection of 17 traditional houses, Bitterne Road and Bath Road. Contract 343. Erection of three blocks of four-storey traditional flats type P, 14 flats per block, Bitterne Road and Bath Road. Contract B.327. Erection of block of 14 shops and 26 dwellings with garages and ancillary works at Thornhill Estate. (b) Borough Engineer, Civic Centre. (d) September 9.

**Southend-on-Sea B.C.** (a) Erection of single-storey extension to the existing dining hall at Southend High School for girls, Thorpe Bay. (b) Borough Architect, 30 Alexandra Street, Southend-on-Sea. (c) £2. From applications a selected list of tenders will be made. (d) September 6.

**Swinton and Pendlebury B.C.** (a) Erection of 70 houses and six blocks of four flats, with roads and sewers at Beehive Estate (section 3) at Clifton, Lancs. (b) Borough Engineer and Surveyor, Town Hall, Swinton. (e) October 3.

**West Bromwich B.C.** (a) Erection of 132 maisonettes in blocks of four storeys. (b) W. H. Greenwood, Borough Engineer and Surveyor, Town Hall. Bills of quantities and forms now available. (e) September 16.

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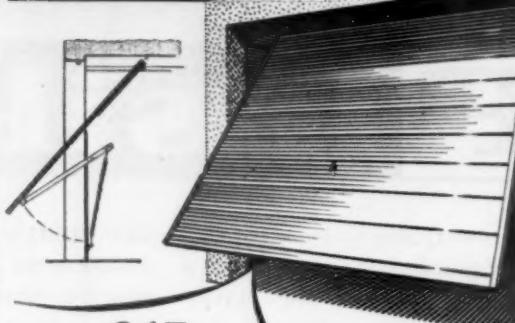
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# Official Announcements

APPOINTMENTS CONTRACTS TENDERS

Close for press • first post Monday for following Wednesday issue.

Rates • 25s per inch and pro rata, minimum half inch.

## APPOINTMENTS

### County Borough of Walsall

Public Works Department

APPLICATIONS are invited from suitably qualified persons for appointments as **ASSISTANT ARCHITECTS** in the Architects' Section of the Public Works Department, at commencing salaries, according to experience and capabilities, within the following grades:

- (a) A.P.T. Grade IV, £1,065-£1,220 per annum.  
(b) Special Grade, £785-£1,070 per annum.

The Department is engaged on an extensive programme of architectural work which includes schemes of Comprehensive Housing Development incorporating multi-storey flats; a school programme including a Comprehensive School, College of Art and a Youth Centre; redevelopment projects within the Central Area embracing a new Police Headquarters, Law Courts, Shops, Offices and other buildings associated with a proposed two-tier ring road.

Applicants should disclose if they are related to a member or officer of the Council. All posts are superannuated and subject to medical examination. Housing accommodation will be made available if required.

Applications, indicating the appointment applied for, together with details of age, present position, salary, qualifications, details of experience and the names of two referees, should be submitted to reach the undersigned by Monday, September 12, 1960.

M. E. HABERSHON,  
Borough Engineer and Surveyor.  
Council House,  
Walsall,  
Staffs.  
August 19, 1960.

[6920]

### ARCHITECTS

#### Ministry of Housing and Local Government

PENSIONABLE posts (2 Senior, 3 Main Grade) in a newly-created development group in London for registered Architects (men and women). For the Senior posts candidates should normally be at least 40 on September 1, 1960, and have experience of research and/or development, and in the running of building contracts. For the Main grade posts candidates should normally be at least 35 on September 1, 1960; preference will be given to applicants who have some experience of development work, a keen interest in research, strong design capacity, and practical building experience. Duties include research into design, construction, and costs of housing and other types of local government buildings, preparation of advisory bulletins and studies, and carrying out selected development projects in the housing field. Salaries (men, London): £1,840-£2,120 (Senior Grade), £1,325-£1,780 (Main Grade). Starting pay may be above minimum in each case. Write Civil Service Commission, 17 North Audley Street, London, W.1, for application form, quoting S/5185/60. Closing date, September 27, 1960.

[6928]

### Warwickshire County Council

Architect's Department

#### (a) DEPUTY GROUP ARCHITECTS

(Two) Grade A.P.T. IV-V (£1,065-£1,375)  
APPLICATIONS are invited from qualified and experienced architects for these posts, which are for the groups handling projects for the Council's education building programme.

In each case the post is one of responsibility requiring a high degree of initiative and design ability in up-to-date forms of construction, use of materials, control of costs, job planning and organization.

The successful applicant will also be expected to deputise generally for the group architect.

#### (b) ARCHITECTS

Special Grade (£785-£1,070)

Applications are invited from architects who have passed Part I and II of the R.I.B.A. final or special examination or their equivalent at one of the recognized schools of architecture. The successful applicants will work in groups on large projects, and an opportunity will be given to men with enthusiasm and ability to design and carry out projects under a group architect.

#### (c) ARCHITECTURAL ASSISTANTS

Grade A.P.T. II (£765-£880)

Vacancies exist for assistants who are up to intermediate R.I.B.A. standard and who require experience in a variety of interesting projects.

The commencing salary can be within the grade according to ability and experience. Five-day week worked. The Council have schemes for the payment of removal expenses and a lodging allowance to married officers. Application forms and full conditions applicable to the appointments can be obtained from Eric Davies, F.R.I.B.A., A.M.T.P.I., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,  
Clerk of the Council.

Shire Hall,  
Warwick.  
July, 1960.

[6932]

### Bracknell Development Corporation

APPLICATIONS are invited for the post of **ARCHITECT**, salary range £1,163-£1,390. Applicants must be Corporate Members of the R.I.B.A. Superannuation schemes, medical examination. Housing available. Apply by September 6, 1960, giving age, education and qualifications, experience and appointments held (with dates and salaries) and names of two referees, to General Manager (A), Bracknell Development Corporation, Farley Hall, Bracknell, Berks. [6909]

### Bracknell Development Corporation

APPLICATIONS are invited for the post of **CLERK OF WORKS** in the Chief Architect's Department. Salary range £880-£1,065. Superannuation schemes, medical examination. Housing available. Apply by September 6, 1960, stating age, when available to commence duties, experience and appointments held (with dates and salaries) and names of two referees, to General Manager (C.W.A.), Bracknell Development Corporation, Farley Hall, Bracknell, Berks. [6910]

### Sittingbourne and Milton

Urban District Council

#### ASSISTANT ARCHITECT

APPLICATIONS are invited for the above appointment from persons suitably experienced in housing and other local authority work.

National Scheme of Conditions of Service and Local Government Superannuation Acts apply to the appointment. Salary within A.P.T. Grade III or Special appropriate to qualifications and experience.

Housing accommodation will be considered according to needs within the present inclusive rentals of £2 2s and £2 1s per week. 50 per cent of the successful candidate's removal expenses will be paid by the Council.

Applications, with names and addresses of two persons to whom reference may be made, should reach the undersigned not later than Tuesday, September 6, 1960.

D. ALLEN,  
Clerk of the Council.

Council Offices,  
76 High Street,  
Sittingbourne.  
August 24, 1960.

[6931]

### City of Carlisle

APPLICATIONS are invited from **QUALIFIED ARCHITECTS** to work on an interesting building programme. There are three posts which offer scope for initiative and imagination and an opportunity to carry a project through from sketch design to completion. Salary range A.P.T. IV (£1,065-£1,220 per annum). Housing accommodation considered. Application forms together with further particulars can be obtained from the City Engineer, 18 Fisher Street, Carlisle, to whom applications should be sent by September 5, 1960.

H. D. A. ROBERTSON,  
Town Clerk.  
[6899]

### Borough of Stratford-upon-Avon

#### ARCHITECTURAL ASSISTANT

A.P.T. II/III

APPLICATIONS are invited for the above appointment on the staff of the Borough Engineer and Surveyor at a salary in accordance with Grade A.P.T. II-III, £765-£1,065, commencing at a point to be determined according to qualifications and experience.

Preference will be given to candidates with previous local government experience who have passed the Intermediate examination of the R.I.B.A. and previous Planning experience would be an advantage.

The Council will, if necessary, be prepared to consider the provision of housing accommodation.

Conditions of appointment and forms of application may be obtained from the undersigned to whom completed forms should be returned by not later than September 19, 1960.

P. C. SMART, M.I.C.E., M.I.Mun.E.,  
Borough Engineer and Surveyor,  
Borough Engineer's Department,  
Municipal Offices,  
Stratford-upon-Avon.  
August 22, 1960.

[6924]

## Official Announcements

### APPOINTMENTS (cont.)

#### City of Leeds City Architect's Department Quantity Surveying Staff

A NUMBER of vacancies occur in the Quantity Surveying Section which deals with the preparation of bills of quantities and other work in connection with the large building programmes of the department. These programmes include schools, housing with multi-storey flats, hostels and other interesting projects and the posts offer opportunities to work as part of a team in a progressive office.

**Post No. 1, Senior Assistant Quantity Surveyor**, Grade B (£1,320-£1,485).

Applicants should have wide experience in the preparation of bills of quantities for major works including schools.

**Post No. 2, Senior Assistant Quantity Surveyor**, Grade A (£1,310-£1,420).

Applicants should have considerable experience in taking off and preference will be given to those with experience in cost analysis and cost planning.

**Post No. 3, Senior Assistant Quantity Surveyors**, Grade A.P.T. V (£1,220-£1,375).

Applicants should have considerable experience in taking off, in the measurement of work in progress and the settlement of final accounts for major schemes.

**Post No. 4, Senior Assistant Quantity Surveyors**, Grade A.P.T. IV (£1,065-£1,220).

**Post No. 5, Senior Assistant Quantity Surveyors**, Grade A.P.T. III (£880-£1,065).

Applicants for posts Nos. 4 and 5 should be experienced in the measurement of variations and the settlement of final accounts for large schemes and should have some experience of taking off.

**Post No. 6, Senior Worker-up**, Grade A.P.T. III (£880-£1,065).

It is essential that applicants for this post should have the ability to write a good bill for major schemes and should have wide experience of this type of work in a professional office.

Applicants for posts Nos. 1, 2 and 3 should hold appropriate professional qualifications and applicants for posts Nos. 4 and 5 should have reached the appropriate standard of qualification and preference will be given to those qualifying for the Quantities sub-division of the R.I.C.S.

The appointments are superannuable—medical examination.

Further details and application forms may be obtained from the undersigned and applications are to be returned by 12 noon on Monday, September 5, 1960. Canvassing disqualifies.

**J. R. SHERIDAN-SHEDDEN**,  
City Architect.

Priestley House,  
Quarry Hill,  
Leeds 9. [6868]

#### ARCHITECTURAL ASSISTANTS INTERMEDIATE OR FINALS STANDARD required in

Chief Architect's office

Interesting and varied work. Five-day week, bonus, etc. Appointments permanent and superannuable.

Write (in confidence) stating age, experience and salary required to Personnel Manager,

**WATES LIMITED**  
London Road, Norbury, London, S.W.16  
[0830]

#### City of Leeds

City Architect's Department

APPLICATIONS are invited from persons holding appropriate professional qualifications for the following permanent posts:

- (a) **Assistant City Architect (Housing)**.
- (b) **Assistant City Architect (Education and General)**.

Salary scale £1,790-£2,085 per annum. Grade "F".

The Assistant City Architect (Housing) will be responsible, under my control, for large house building programmes and should have had a wide experience of all forms of housing layout, comprehensive developments and multi-storey flats. The Assistant City Architect (Education and General) will be responsible, under my control, for major educational building projects and large public buildings, e.g. multi-storey college, municipal office block, abattoir, swimming baths, etc.

Both posts carry great responsibilities and offer worthwhile opportunities to those who are keenly interested in design and the planning and organization of extensive municipal building schemes. Further details and application forms may be obtained from the undersigned.

Applications are also invited for the following permanent posts in (a) Housing and (b) Education and General sections of the department.

**Post No. 1, Principal Architects**, Grade C (£1,385-£1,620).

**Post No. 2, Assistant Principal Architects**, Grade B (£1,320-£1,485).

**Post No. 3, Senior Assistant Architects**, Grade A.P.T. V (£1,220-£1,375).

**Post No. 4, Senior Assistant Architects**, Grade A.P.T. IV (£1,065-£1,220).

**Post No. 5, Assistant Architects**, Grade A.P.T. III (£880-£1,065).

**Post No. 6, Architectural Assistants**, Grade A.P.T. II (£765-£880).

Applicants for the senior posts must hold appropriate professional qualifications and should have had a wide experience in either housing, education or other types of large public building work and will be required to design and work on these projects to completion. Applicants will be considered on their capability for design, experience, contemporary outlook and suitability.

The appointments are superannuable—medical examination.

Application forms obtainable from the undersigned, are to be returned by 12 noon on Monday, September 5, 1960. Canvassing disqualifies.

**J. R. SHERIDAN-SHEDDEN**,  
City Architect.

Priestley House,  
Quarry Hill,  
Leeds 9. [6867]

#### Turriff Construction Corporation Development Group is to appoint several PROJECT ENGINEERS

each to cover a number of contracts co-ordinating the interests and efforts of clients, design and construction teams. Must have comprehensive site and office experience. The wide interests of this Development Group will call for men of drive and initiative with either civil, structural, mechanical or architectural background.

Attractive salaries, bonus and Pension Scheme. Suitable transport provided. Write full particulars to:

**D. H. DUCKWORTH**,  
Chief Executive, Development Group,  
Turriff Building,  
Great West Road, Brentford, Middx.

[6921]

#### Lanark County Council

**ARCHITECTURAL ASSISTANTS** (Qualified A.R.I.B.A.) required for County Architect's Department with headquarters at Motherwell, on the following J.I.C. Salary Scales: Admin. "D", £1,040-£1,120; Professional Assistants, £795-£1,075. Placing on scales may be given according to qualifications and experience. Employment offers wide scope in development of modern building programme.

Medical examination. Superannuation. No canvassing.

Applications stating age, qualifications and experience, together with names and addresses of three referees, should be lodged with County Clerk, P.O. Box No. 1, Glasgow, within 14 days of advertisement. [629]

**SURVEYORS** (Basic Grade) required by Ministry of Works in LONDON, HOME COUNTIES AND ABERDEEN. National Salary Scale £805 (at age 25) to £1,260 per annum. Starting pay up to £1,095 at age 34 according to age and experience. Salary for London posts is subject to an addition of up to £40 per annum. Five-day week, 22 days annual leave. Prospects of promotion and opportunities for permanent and pensionable posts.

Applicants should be registered architects by examination or corporate members of R.I.C.S. (Building Section). Apply stating age, qualifications and full details of experience to Chief Maintenance Surveyor (Recruitment), Ministry of Works (A), Stanley House, Marsham Street, London, S.W.1. [6893]

#### Somerset County Council

Architect's Department

APPLICATIONS are invited for the appointment of an **AREA BUILDING SURVEYOR**—A.P.T. II (£765-£880).

A good practical knowledge of all aspects of the building trade is essential, particularly the maintenance of public buildings, schools and houses. Duties include preparation of estimates, specifications, the supervision and inspection of works in progress and the subsequent certification of accounts.

The successful applicant will be required to reside in or near Yeovil. An essential user car allowance will be paid. N.J.C. conditions of service. Medical examination.

Applications, giving age, previous and present appointments, qualifications and the names and addresses of two technical referees, must be submitted on or before Friday, September 9, 1960.

**BERNARD C. ADAMS**, A.R.I.B.A.,  
County Architect.

The Crescent,  
Taunton.

[6934]

#### Middlesex County Council

**ASSISTANT ARCHITECTS**, salary range £830-£1,265.

Commencing salaries will be assessed according to ability and experience.

The department has in hand an interesting programme of works which will be designed under the direction of Mr. Whitfield Lewis, F.R.I.B.A., County Architect.

Organization is on a group basis and full scope will be given to Architects who show marked design ability.

Good career prospects can be expected. Prescribed conditions.

Application forms from The County Architect, 1 Queen Anne's Gate Buildings, Dartmouth Street, S.W.1, returnable by October 3. (Quote E.265 ABN.)

[6938]

## Official Announcements APPOINTMENTS (cont)

**County Borough of Grimsby**  
Borough Engineer and Surveyor's  
Department

**ARCHITECTURAL ASSISTANT**

APPLICATIONS are invited for the appointment of an Architectural Assistant on the permanent staff of the department, Grade A.P.T. II, commencing salary £765, rising to £880 per annum. The appointment will be subject to the Conditions of Service of the National Joint Council, terminable by one month's notice on either side, and to the provisions of the Local Government Superannuation Acts. The successful candidate will be required to pass a medical examination.

Housing accommodation for a married person will be available if required. Applications stating age, qualifications, present and past appointments and details of experience, together with the names and addresses of two referees, must be delivered to the undersigned not later than first post on Monday, September 19, 1960.

J. V. OLDFIELD, F.R.I.C.S., L.R.I.B.A.,  
Borough Engineer and Architect.  
Municipal Offices,  
Town Hall Square,  
Grimsby.

August, 1960. [6935]

**Newcastle upon Tyne**  
**C.W.S. ARCHITECTS**

APPLICATIONS are invited for the following vacancies in a busy office, handling a wide variety of commercial and industrial projects.

Applicants must have a particular interest and ability in modern design.

(a) **Senior Assistant Architects.**

Salary range £975-£1,300.

Must be Associates R.I.B.A.

(b) **Assistant Architects.**

Salary range £700-£1,050.

Preferably have passed Intermediate R.I.B.A.

Reply, stating age, experience, etc., by September 24, 1960, to R. A. Thomas, A.R.I.B.A., Chief Architect, C.W.S. Ltd., 90 Westmorland Road, Newcastle upon Tyne. [6936]



### ASSISTANT ARCHITECTS ARCHITECTURAL ASSISTANTS

During the coming years, in addition to the vast programme of rebuilding or extending Boots retail branches, new industrial projects will be commenced. The Architects Department, headed by Mr. C. St. C. Oakes, M.B.E., F.R.I.B.A., is responsible for the whole of this work which, besides retail premises, includes laboratories, office buildings, warehouses, chemical and other production units and ancillary buildings.

Vacancies exist with this Department for Assistant Architects and Architectural Assistants to work on industrial projects. These positions are permanent and pensionable and a five-day week is in operation. Applications should be sent, giving full details to the Personnel Manager, Boots Pure Drug Co. Ltd., Station Street, Nottingham, quoting reference No. A.B.N.1.

### ARCHITECTURAL APPOINTMENTS VACANT

**ASSISTANTS** urgently required, intermediate to final standard. Interesting and varied work with opportunities for site supervision. Salary from £600 plus L.V. G. Gordon Stanham, Adamson, Gray & Partners, 9/10 Fenchurch Street, London, E.C.3. MANSION House 1010 or 5274. [0350]

**DEVEREUX & DAVIES** require capable and enthusiastic assistant architects, salary £1,000 per annum or according to experience and ability.—Devereux & Davies, 3 Gower Street, Bedford Square, London, W.C.1. [0660]

**ARCHITECTURAL ASSISTANT**, Intermediate standard. Busy London office. Good prospects. Box 3668. [0080]

**WEST END OFFICE** requires Assistant Architects of Final and Intermediate Standards for interesting industrial projects in Home Counties. Good salaries offered to men with initiative and ability. Bonus scheme, five-day week, holiday arrangements honoured. Box 0627. [0380]

**ARCHITECTURAL ASSISTANT** required, with at least two years' office experience. Apply in writing to Thomas Mitchell & Partners, 20 Bedford Square, London, W.C.1. [0916]

**BASIL SPENCE & PARTNERS** require qualified and experienced Architects to fill positions of responsibility on a major building programme. Write to 48 Queen Anne Street, W.1, stating experience and salary required. [0740]

**ARCHITECTURAL ASSISTANT** required, able to work on own initiative, varied practice, small office, opportunity for advancement. Write or phone, Nicholson & Rushton, 2 New Square, Lincoln's Inn, W.C.2. HOLborn 2095. [0980]

#### WEST COUNTRY

**GEOFFREY BAZELEY & BARBARY** require competent Assistants for their Penzance and Plymouth Offices. Intermediate or better. Details and salary required to 5 Portland Square, Plymouth. [6912]

**BLACKPOOL**. Architectural Assistants to R.I.B.A. Final standard required for shop development work. Ability to drive an advantage. Full details in first instance to: Whitaker, Gardner and Lees, 16 Edward Street, Blackpool. Tel: 21094. [6907]

**ARCHITECTURAL ASSISTANT**, London, Final standard. Industrial and commercial. Progressive and interesting. Salary according to experience and ability. Box 3667. [0079]

**ST. ALBANS**, Herts. Established firm of Architects with varied and growing practice require Assistant, intermediate standard or higher. Details of age, experience, salary required, 'phone or write, Herbert Cox & Gear, 2 Harpenden Road, St. Albans. Tel: 54367. [6913]

**EDINBURGH**. Qualified Assistant wanted immediately for small expanding practice. Please write giving details of age, experience and salary required to Law and Dunbar-Nasmith, 54 Frederick Street, Edinburgh. [6904]

**FRED\***? Frank needs you urgently. Phone Guildford 60235. (\*He's an unqualified assistant). [6902]

**PHILIP FREEMAN** requires a qualified assistant to work directly with him and assist in taking charge of varied work including showroom, office and hospital. Salary by arrangement. Luncheon vouchers. Three weeks paid holiday. Apply, Poulton & Freeman, F.R.I.B.A., 6a, Wyndham Place, London, W.1. Telephone: AMBassador 2211. [6917]

**ASSISTANT ARCHITECTS**, salary up to £1,250 according to ability and experience, for Colleges, Hostels, Schools all types. Apply—Charles Pike & Partners, 14 Lincoln's Inn Fields, London, W.C.2 or phone HOL. 3532 for appointment. [6922]

**ARCHITECTS** require assistant, intermediate/final standard, salary according to qualifications and experience. Nottingham office. Box 1520. [6926]

**QUALIFIED ASSISTANT** with ability, view partnership in busy practice after probationary period. Salary by arrangement. Apply by letter—W. Elsworth, A.R.I.B.A., Castle Gates, Shrewsbury. [6927]

**ANY IMAGINATIVE ARCHITECTURAL ASSISTANT** who would like to work in a team of three on an unusual administrative building and a University Laboratory Block is invited to telephone Whitehall 2552. Salary around £850. [0741]

**APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANTS**. Applications are invited from Qualified Architects to take up responsible positions with Consultant Architects to large-scale Estate Developers in the Southern Counties. The posts offer considerable scope in a variety of projects.

The Contracts already in hand will extend for a minimum period of ten years.

Subject to a probationary period of six months, the posts will be permanent and a generous non-contributory pension scheme is available.

The present contracts cover normal domestic buildings up to twelve-storey units and from small estates up to small townships of some 2,500 units, shops, offices, hall, churches, etc.

Applicants must, therefore, have good design sense, first-class knowledge of construction and administration and experience of multi-storey development.

Salaries will be commensurate with ability and experience. Please apply in writing, stating age, experience and salary expected to:

Walter G. Palmer & Associates, Chartered Architects and Surveyors, 1 Spring Crescent, Portswood, Southampton. [6933]

# Miscellaneous Announcements

Rate · 1/9d per line minimum 3/6d, average line 6 words. Each paragraph charged separately.

Situations wanted · advertisements are accepted at the specially reduced rate of 6d per line minimum 1/6d

Box Numbers · add two words plus 1s for registration and forwarding replies which should be addressed

c/o "The Architect & Building News," Dorset House, Stamford Street, London, S.E.1.

Semi-display · advertisements with centralized lines are charged at 25s per inch, and pro rata, minimum half inch.

Press Day · Monday. Remittances payable to Iliffe & Sons Ltd., Dorset House, Stamford Street, London, S.E.1.

NO RESPONSIBILITY ACCEPTED FOR ERRORS

## SITUATIONS VACANT

**GOOD COMMISSION** paid to Agents and others for introduction of business in Industrial and Decorative Paints. Technical assistance available. Box No. 1404. [6908]

## TECHNICAL REPRESENTATIVE AND SALES MANAGER

for revolutionary type of Aluminium Acoustic Ceilings in the London Area. Must have good connections with Architects and Builders. Unlimited prospects for right man. Full details in strictest confidence to Managing Director. Box 1557. [6937]

**EXPERIENCED** Builder's General Foreman required. Apply G. E. Sargeantson & Son Ltd., 12 Kingsway, Scunthorpe. State age, experience and salary required, also three references will be needed. [6925]

**BRIAN PEAKE** requires Assistant interested in and capable of running small contracts. Tel: GROsvenor 7888. [6930]

## SITUATIONS WANTED

*Advertisements under this heading only are accepted at the specially reduced rate of 6d per line, minimum 1/6.*

**SALES REPRESENTATIVE** for leading U.K. window manufacturer for Far East returning to England is looking for similar job with a firm who appreciates hard work. Box No. 1439. [6914]

## BUILDINGS FOR SALE

**SECOND-HAND** Sectional Timber Buildings, 24ft x 12ft, £102; 30ft x 15ft, £138; 40ft x 18ft, £192; 60ft x 20ft, £302, floors extra, delivery included 100 miles. Also similar new buildings; lists. Universal Supplies, Crabtree Manorway, Belvedere, Kent (Erith 32948). [6076]

## MISCELLANEOUS

**STEEL AND WOVEN TAPES** REPAIRED at moderate cost with prompt dispatch. Send a broken tape for trial. Large stocks of new Chesterman Steel and Woven Tapes in all patterns and lengths. Quotations per return. Quantity discounts.—A. W. Phillips & Son (Upton Park) Ltd., 47/51 Plashet Grove, London, E.6. [6047]

## SHOPFRONTS

**CONSULT** Burns Shopfitters for your Budget-priced Shopfronts. 8 Essex Place, London, W.4. CHI 1852/7601. [6080]

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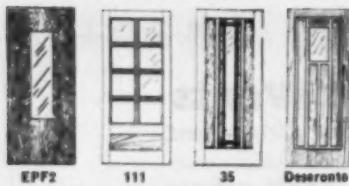
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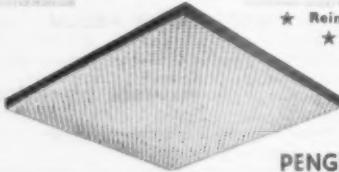
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